# BUSINESS WEEK

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### A Threat

APPLIANCE MAKERS NEVER THOUGHT OF PAGE 103



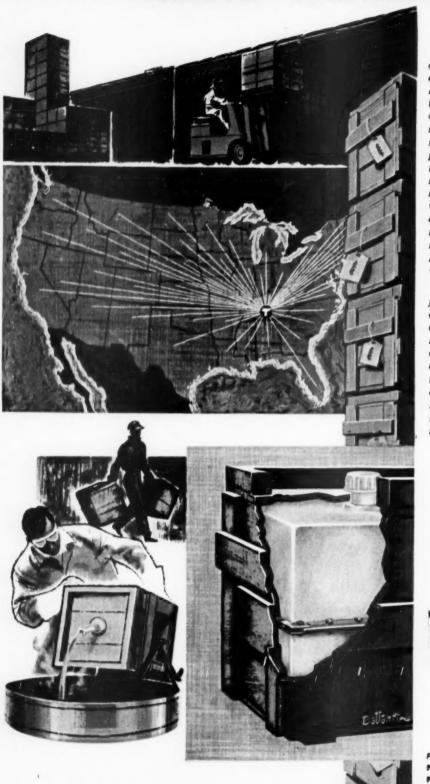
Brooklyn: There's more than the Dodgers across the bridge (page 126)

A McGRAW-HILL PUBLICATION

OCT. 3, 1953

TWENTY-FIVE CENTS

# THERE'S A TOUCH OF TENNESSEE IN CHEMICAL CONTAINERS



KARBOX!-the revolutionary new development in chemical shipping containers has the outstanding advantage of being not only light and nonbreakable, but also square-shaped for space saving. Karbox's polyethylene plastic liner is inert in contact with most corresive acid solutions. This new container saves freight costs because it weighs less than half as much as conventional carboys and is square-shaped to carry more payload in less space. It is easy to handle and stacks well, nesting to lock the load.

KARBOX will do a better job of carrying many chemicals to manufacturers in all of the 48 states and in foreign lands as well. Many other products from TENNESSEE are also used by key industries throughout the country and abroad. That's why TENNESSEE is known from Coast to Coast as an industry serving all industry.



# TENNESSEE PRODUCTS & CHEMICAL

Corporation
NASHVILLE, TENNESSEE

Sales Office: 350 Fifth Avenue, New York City

Producers of: FUELS · METALLURGICAL
PRODUCTS · TENSULATE BUILDING
PRODUCTS · AROMATIC CHEMICALS
WOOD CHEMICALS · AGRICULTURAL
CHEMICALS

# RESEARCH KEEPS B.F. Goodrich



# Rubber moves jaws that chew rocks by the ton

A typical example of B. F. Goodrich improvement in rubber

Inside that mass of metal are big jaws that chomp like human teeth. But it's rocks they bite and grind-2000 tons a day—for building concrete roads! The jaws are powered by rubber belts and every time they grip and grind a new batch of rock, you can imagine the jerking jar that hits those belts. They were being broken and torn to shreds in days.

Looking for ways to save, the contractor tried a kind of belt new to him -Grommet V belts-developed and made only by B. F. Goodrich. A grommet is a cord loop inside the belt. It is made like a giant twisted cable except

that it's endless-no splices or overlaps. The grommets make it a flexible belt but one that stands shocks and heavy loads far better than ordinary belts. No other kind of belt has grommets; no other belt stands so much punishment or lasts so long.

After the B. F. Goodrich Grommet V belts were installed, it was found they lasted 200% longer than the belts used before—important money was saved, and time formerly needed for replacement could now be used in profitable production.

This performance is typical, not an unusual case at all. It's the result of

a policy at B. F. Goodrich—the policy of constant product improvement, of never considering a product "good enough". If you use rubber belting, hose or other industrial rubber goods, it will pay you to check with your BFG distributor before you buy to see if you, too, can save money because of B. F. Goodrich research. Or write The B. F. Goodrich Company, Dept. M-95, Akron 18, Obio.

Gremmet-T. M. The B. F. Goodrich Co.

B.F. Goodrich



As the Wright Brothers' rickety flying machine (1903) was transformed into the soaring, swifterthan-sound jet plane . . .

As time went on, designers and engineers had to ask more and more of metals, both new and old alike: more strength, more resistance to heat damage, more toughness, more hardness, more corrosion resistance.

In general engineers got what they asked for, too. Thanks mainly to metallurgical research. And to industry's ingenuity in utilizing Nickel to add new properties to other metals and to produce new alloys for special purposes.

Today, Inco Nickel is used to add strength, toughness, or other special properties to more than 3,000 iron, copper, aluminum and other alloys.

Nickel Alloys are aboard the S. S. United States. They're in vital parts of most big harvesting machines. In the engines of jet planes, too.

And The International Nickel Company is constantly exploring and developing new alloys containing Nickel to have the right metal ready when the next big, bright idea comes along.

Yours for the Asking . . . Draw on Inco's fund of useful information on the properties, treatment, fabrication and performance of alloys containing nickel.

Write for-"List A" of available publications.



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BUSINESS WEEK . OCT. 3 . NUMBER 1257

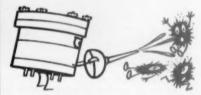
BY O. SOGLOW



DUST DEADLY AS BACTERIA. Certain types of dust are extremely harmful to human beings. Quartz dust, for example, can sometimes lead to diseases such as silicosis, cancer and tuberculosis.



TRAPS DUST! Air-Maze air filter panels keep troublesome dust out of hotels, railroad cars, commercial and industrial buildings. Cleaning bills are cut, employees and customers are happier. Air-Maze filter panels are easily cleaned, have high dirt-holding capacity.



STOPS DUST WITH OIL! Air-Maze oil bath filters literally "scrub" intake air in a pool of oil. Used on large diesel engines and air compressors, they keep damaging dust and dirt from moving parts.

WHETHER YOU BUILD OR USE engines, compressors, air-conditioning or ventilating equipment, or any device using air or liquids - the chances are there is an Air-Maze filter engineered to serve you better. Representatives in all principal cities. For condensed product catalog write Air-Maze Corporation, Dept. C, Cleveland 28, Ohio.

# The Filter Engineers

AIR FILTERS

LIQUID FILTERS OIL SEPARATORS GREASE FILTERS

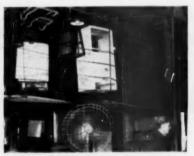


W. Paul Jones, president (left), and Don Dailey, vice president in charge of product planning, display the ice-maker in Servel's revolutionary new refrigerator, which makes ice cubes automatically without trays. Servel also makes Wonderbars, home freezers, room

air conditioners, water heaters, cartridge cases, F-84F Thunderstreak sections, and All-Year (1) air-conditioning systems for homes. Wyandotte Chemical's products are used in the manufacture of all these Servel products, as well as in drugs, detergents, glass, rubber, food, paper.



2 Seven different Wyandotte specialized products are used for metal cleaning at Servel. In addition to servicing the metal-treating industry, Wyandotte supplies bottlers, dairies, laundries, food packers, restaurants, institutions, and railroads with specialized products for cleaning problems.



3 Servel refrigerator components after neutralizer bath. Wyandotte basic chemicals, Caustic Soda and Soda Ash, are used by Servel for neutralizing—also for stripping and for softening water. Wyandotte also makes products for neutralizing in porcelainenameling processes and after-acid pickling.



4 Cartridge cases for the Armed Forces roll off the production lines on schedule at Servel. B.N., a highly effective electrocleaner, and No. 38, a high-detergency, spray-washer cleaner, are two Wyandotte specialized metal-treating products used by Servel in making cartridge cases.



# How Wyandotte helps chill your drinks...heat or cool your home

W. Paul Jones, president of Servel, Inc., whose products cater to your comfort, knows how much you depend upon Wyandotte chemicals

Everything in a modern home is helped directly or indirectly by chemistry . . . including Servel's newest refrigerators and All-Year ® air-conditioning units.

Mr. Jones, Servel's president, will tell you that these unique products are marvels of lasting satisfaction . . . that each metal part has been painstakingly and properly treated.

In Servel's metal-treating operations, seven different Wyandotte specialized cleaning products are used.

Servel depends on Wyandotte for basic chemicals, too. Why? Because Servel has found that buying many chemicals and cleaning products from one source of supply has these advantages: carload shipments, centralized responsibility, uniformly high quality, lower use-costs — to name a few.

If you use chemicals, or treat metals, consult Wyandotte, stating your requirements or problems. We will recommend the right product for each task—or work with you to develop new chemicals or cleaners—to do your job better, at lower cost. Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.



Organics, Inorganics—World's largest manufacturer of specialized cleaning products for business and industry



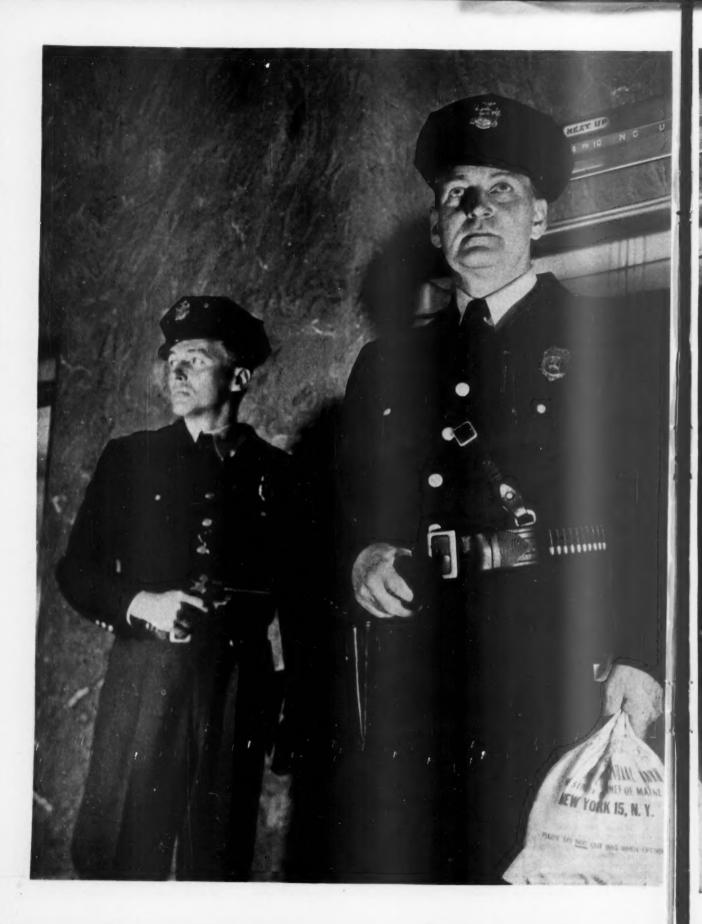
5 Wings for F-84F Jets are made by Servel. Wyandotte supplies the aircraft industry with many basic chemicals as well as metal cleaners, emulsion cleaners, paint strippers, fuel tank desealants. Wyandotte Ethylene Dichloride goes into ethyl fluid used in high-test aviation gasolines.



Servel's Wonderbar (above), a portable silent refrigerette. Servel is forging ahead on new products—imaginative design—careful attention to costs. Buying quality products in carload lots to enjoy low costs a Servel policy. Wyandotte's wide range of products makes bulk buying profitable.



7 Gateway to the future. Entrance to Wyandotte's new research building portrays alchemists' symbols of old. Inside, every facility has been provided to enable us to serve you better, now and in the future. May we help YOU. Write, stating your problems, or bring them in personally.





### Save \$7,000 A Car With New Elevator System

These guards could be rushing your savings to the nearest bank . . . up to \$7,000 per car a year. These savings are made possible by the new elevator team for heavy-traffic buildings—operatorless Selectomatic with Automatic Traffic Pattern Control.

This new elevator system completely eliminates the human element ... does away with car attendants ... turns starters into good-will ambassadors. Automatic Traffic Pattern Control is far more efficient than a manual starter. It operates itself, taking orders directly from your building's traffic.

Regardless of the nature or frequency of the traffic changes,
Automatic Traffic Pattern Control digests the facts and automatically
switches the system to meet the existing demand. 24 hours a day,
it electronically checks passenger flow, promptly adjusts itself to meet
any change in traffic conditions.

Find out more about Automatic Traffic Pattern Control now. It's ideal for new installations. Added to *existing* systems, it makes any elevators ultra-modern. Our nearest office will give your call prompt attention.

### **Westinghouse Elevators**

PASSENGER AND FREIGHT ELEVATORS . ELECTRIC STAIRWAYS

PROTECTIVE MAINTENANCE AND SERVICE

YOU CAN BE SURE ... IF IT'S Westinghouse



## Keep your profits on the up-and-up

smooth production . . . by harnessing the endless saving power of mechanized materials handling. The more effectively you utilize this invaluable tool the more you stand to strengthen your competitive position. Talk it over with the man responsible for materials handling in your plant. Ask him how Towmotor can help increase your profits. A new booklet, "Man-Hour Thieves," points the way. Write for your copy. Towmotor Corporation, Div. 210, 1226 E. 152nd St., Cleveland 10, Ohio. Representatives in all principal cities in U. S. and Canada.



FORK LIFT TRUCKS and TRACTORS

RECEIVING . PROCESSING . STORAGE . DISTRIBUTION

### READERS REPORT

#### Hot Food Hot

Dear Sir:

From the story entitled Hospital Food Served a la Airline [BW—Sep. 5'53,p116], one might get the impression that hospital feeding had been uniformly poor until the advent of the hot and cold cart.

Actually, there is no secret of serving hot foods hot and cold foods cold; it's being done in literally dozens of hospitals, where patients have for years expressed great satisfaction with the food service. The equipment involved is a streamlined system of food service, using assembly line process and automatic tray conveyors that deliver the tray within seconds to the patient floor where it is promptly served at the patient's side.

Lamson Corporation and Samuel Olson Co., . . . respectively, licked the hot food hot problem some twenty years ago. In addition, the trays of soiled dishes are returned to the dish washing area without the need for loading elevators and trucks.

Angus M. Brown

COMMERCIAL DIVISION MANAGER LAMSON CORP. SYRACUSE, N. Y.

### Which Cost of Living?

Dear Sir:

On page 148 of your issue of Sept. 5, you published a comparison of the old and the new cost of living indexes.

It was our understanding that the old index was discontinued in June of this year, and we write to inquire as to whether the figures are and will continue to be available for some months ahead.

Incidentally, have you examined the subject at all, to see how the employer fares in a shift from the old to the new?

A. J. Becker

D. BECKER & SONS PHILADELPHIA, PA.

• Your understanding that the "old" consumer price index was discontinued in June, 1953, is correct. The index on a 1935-39 base included in our table is the "interim adjusted" index.

the "interim adjusted" index.

Through June, 1953, the Bureau of Labor Statistics issued three different indexes on the cost of living, all designed to measure price trends in approximately the same way, but each new index contained improvements over its predecessor. First, there was the "old" index on a 1935-39 base, which has been discontinued. The second, known as the "interim adjusted" index (using 1935-39=100), contains slightly



### WORD SPREADS ALONG THE ASSEMBLY LINE

ANOTHER EXAMPLE

of KELLER Air Tools engineered to industry

The foreman in a factory that makes electronic devices decided to try a Keller Nut Setter for assembling some of the many small parts. He rigged up a temporary air line and installed a single tool.

When it went into operation, word quickly passed up and down the assembly line —"the new tool is lighter,"
"it's easier to handle," "she
keeps 'way ahead of the rest
of us," "says it's easy with
the new air tool."

Soon other workers clamored for new lightweight tools... and eventually the entire shop was outfitted "to keep peace in the family." One assembly line took more than 40 tools, and many times 40 were needed to outfit the whole plant.

When you try Keller Air Tools in your shop, be prepared to go "all the way." You will be pleased at employee reactions, and with their greater daily output with less effort.

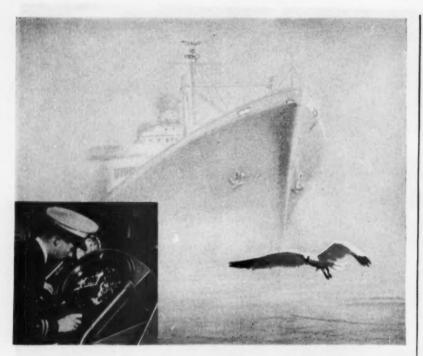
Keller Air Tools are helping to streamline production and reduce costs in thousands of plants. Are they helping in yours?



DRILLS • SCREW DRIVERS • NUT SETTERS • GRINDERS • RIVETERS

AIR MOTORS • AIR HOISTS • AIRFEEDRILLS

KELLER TOOL COMPANY, GRAND HAVEN, MICH.



### Showing the way — Raytheon Radar

Raytheon Mariners Pathfinder\* Radar has earned its popularity among fleet owners and seagoing men of all nations. Nearly 70% of today's radar-equipped transatlantic vessels depend upon it. It is safety insurance in fog or storm at sea, and a guarantee of regular operating schedules.

Behind the success story of Mariners Pathfinder Radar and other precision-built equipment supplied to government, home and industry is the pooled experience of Raytheon's 25 years in electronics. It's a plus you get with every Raytheon product...why Raytheon means "Excellence in Electronics."



RAYTHEON MANUFACTURING COMPANY, WALTHAM 54



RAYTHEON TELEVISION SETS feature new 3,950,000 HOUR TEST by Northwest Air-VU-matic\* Control for all-channel VHF- lines proved that Raytheon Reliable UHF tuning. Raytheon TV - "Built for miniature tubes (CK 5654) out-performed Today - Designed for Tomorrow." See it! ordinary tubes by as much as 68.93%.



different pricing and weighting from the "old" index. The third is the "revised" index (on a 1947-49 base), which is similar to the "interim adjusted" in structure and weighting, but has improvements over it.

The "old" index is no longer available. The "interim adjusted" index will be issued through December, 1953. It is possible, however, to convert the "revised" index to the "interim adjusted."

### For the Record

Dear Sir:

In Business week for Aug. 8 [p. 50], you carried an article entitled Columbia Marks 5th Lp Year as Record Industry Heads for New High. We are delighted that BUSINESS WEEK ran three pages on the record industry of which we are an important part. It's bound to do us all good.

The article gave a generally good picture of what is going on, too. But it underplayed Capitol Records' part. I'll cite two points.

One, the story says Columbia was the only record company to show sales increases last year. Our answer to that is these figures available to all of our stockholders: Capitol sales for last year were \$14,738,000 and were \$13,385,000 in 1951. Net per share was \$1.01 for 1952, compared with 75.5¢ for 1951, certainly an important gain.

Two, the table showing percent of the total record market lists Capitol with 11% in 1951 and 10% in 1952. This is based on a continuous survey made by the Market Research Corp. of America, to which both Capitol and Columbia subscribe. While the in-formation is valuable, it is in no sense authoritative. Actually, exact figures may be obtained from excise tax data which are published by the government. These show that Capitol did 13.23% of the business in 1951 and 14.01% in 1952. These figures show us gaining from 1951 to 1952 where the survey figures published show us losing.

LLOYD W. DUNN

VICE-PRESIDENT CAPITOL RECORDS, INC. HOLLYWOOD, CALIF.

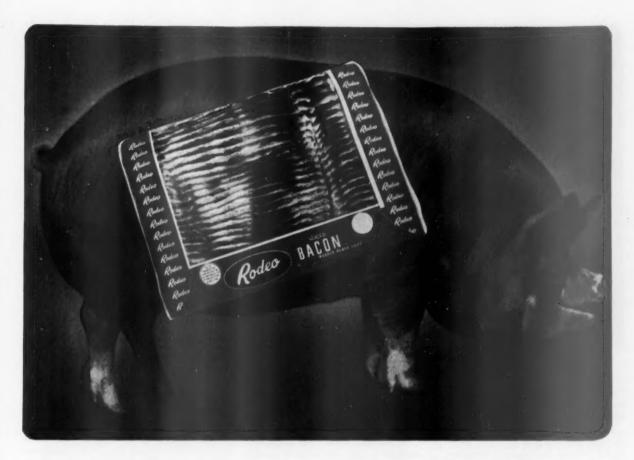
### **Lasting Tribute**

Dear Sir:

In re Personal Business on page 180 of the Sept. 12 issue, sending flowers is not the only way one can express tangible respect for a deceased friend.

For some time I have presented a book, selected with a view to the interests of the deceased, to the public library of his home community. serves as a living memorial.

One interesting result: In place of



# Boy, am I getting FRIED!

It's not this little piggie's fault that he's doomed to wind up in a club sandwich. It's just that bacon looks so good to so many people when it's wrapped in PLIOFILM.

PLIOFILM clings to bacon or any meat product without a trace of sag or wrinkle.

Because of its remarkable moisture-resistance, PLIOFILM won't shrink or stretch when exposed to showcase moisture. There's less smearing—less fogging, even when wrapping products like ham or pork. More than that, PLIOFILM is tough. It takes plenty of handling abuse without puncturing or splitting. It seals in taste, aroma, bloom. And its positive film-to-film seal is virtual insurance against rewraps.

Could your product benefit by these PLIOFILM advantages? Especially when their relative cost is usually even less than that of conventional films? The Goodyear Packaging Engineer will be glad to work with you in designing a PLIOFILM wrap specifically for your problem. Write him at Goodyear, Pliofilm Dept. J-6410, Akron 16, Ohio.



Good things are better in

Pliofilm

3-way protection against air, moisture, liqui

Pliofilm, a rubber hydrochloride-T. M.

The Goodyear Tire & Rubber Company, Akron, Ohio

We think you'll like "THE GREATEST STORY EVER TOLD"-every Sunday-ABC Radio Network-THE GOODYEAR TELEVISION PLAYHOUSE-every other Sunday-NBC TV Network



Why put on extra salesmen to move a large inventory, secure new customers, or boost sagging sales?

Without adding one penny to your payroll, you can multiply your manpower through the magic of merchandise incentives and the unlimited influence of salesmen's families.

Hundreds of firms are getting plus sales from Cappel, MacDonald planned incentive campaigns, without the trouble and expense of hiring and training additional men.

One appliance company doubled sales in 60 days. A retail chain reported a 660% sales increase on one line. A dairy added 18,738 new customers in just 11 days. Other firms upped sales 20%, 50%, 62.7%, 105%.\*

Your men (or your jobbers' or dealers' salesmen) will perform equally well—or better—when you put the power of merchandise prizes to work for you in a C-M planned incentive campaign.

Why? Mainly because a sound merchandise prize campaign enlists the support of a salesman's wife and family. Their support, encouragement, and very real help has the effect of doubling your sales force, by causing each man to increase his efforts substantially.

Wives and families will throw their support to your products or services when their breadwinner can also be a prize winner. This is particularly true when the prizes are of such high quality and wide variety that they appeal to every member of the man's family.

More than 1600 such luxurious merchandise prizes are brought together in the C-M catalog—the heart of the most successful sales campaigns and other incentive plans used by the nation's industrial leaders.

Add to this our ability and experience in planning resultful campaigns, plus our talent and facilities to provide colorful, exciting promotion materials, and you get a complete incentive service that saves you money, time, and trouble.

Want to know more? Without cost or obligation, C-M specialists will gladly work out specific suggestions enabling you to "double" your sales force without adding a man.

\*A request on your letterhead will bring proof of these figures.

the usual formal expression of thanks by the family of the deceased, when flowers are sent, my letter to them telling of my gift, and the usual notification to them by the local librarian, bring some letters I shall want to retain for a long time.

JOSEPH A. SHIRLEY

DALLAS, TEX.

### **Good Management**

Dear Sir:

In your article, The Management Pattern—The Quest for Executive Theories, on page 50 of the Sept. 19 issue, you have presented as good management what is quite largely the result

of good management.

How do you get new plants? By good management in sales to provide surplus funds, capacity to sell more; by good manufacturing that keeps costs competitive or below. How do you get new products? By good management in providing and using market research, product research, and the experience of merchandisers and sales people. And how do you get aggressive promotion? By the teamwork of analysts of selling costs and those who know how advertising can reduce them, by skillful management of the firm's finances to provide funds, by releasing the energies of creative minds to spend these funds to exert the most leverage on the minds of the buying public, by the coordination of all these factors by sales executives who forecast and set objectives, and sweat and strain to meet them.

In short, good management has to permeate the organization before it is likely to warrant a decision to add a product or expand a plant. For, a firm can bring out a new product, promote it aggressively, expand its plant—and wreck the company, without good management. And good management comes

from the top man.

I especially beg to differ with your statement that you "become a successful management man by learning your industry." Many an assistant knows his industry better than many a top management man, but without the capacity for good management. And many a top executive with a good knowledge of management has made a conspicuous success after coming into the top job from a completely different industry, with no knowledge of the new industry.

But you have still done business a service by shocking management into re-examining the "hokum" that is handed out as good management. . . . There are good doctors and bad doctors, good consultants and bad consultants. Such service is exactly as good as the man who gives it, and no more.

E. H. VAN DUZEE

MANAGEMENT CONSULTANT MONTCLAIR, N. J.

Cappel, MacDonald and Company

129 South Ludlow Street, Dayton, Ohio. Offices in principal cities

Originators of Merchandise Incentive Campaigns

# How Oxygen...and LINDE SERVICE\* HELPED REMOVE A "LOST HEAT" OF STEEL IN A DAY...INSTEAD OF MONTHS

CUTTING STEEL . . . TO CUT DOWN-TIME! LINDE SERVICE, working with mill people, adapted this LINDE C-60 heavy duty oxygen cutting blowpipe to powder cutting because of slag and refractories present in the lost heat. In less than 12 hours, the spill was reduced to easily bandled size

Tons of molten steel, pouring through a breakout in an open hearth furnace, settled in the furnace pit.

The last time a heat was lost, the mill had to wait three months for special equipment to remove the huge spill. That meant costly delay in repairing the furnace and a floor cluttered with a mass of steel.

This time, however, the mill management called in LINDE SERVICE to help. LINDE engineers recommended bringing in a LINDE heavy duty oxygen cutting blowpipe that was operating in the mill's scrap cutting yard. A temporary fixture was built, and in less than 12 hours the lost heat was cut into sections that were easily removed to the scrap yard. The furnace was repaired and back in operation in record time, producing steel that would otherwise have been lost.

### \* LINDE SERVICE

is the unique combination of research, engineering, and over 40 years of accumulated know-how that is helping LINDE customers save money and improve production in their uses of oxygen and oxy-acetylene processes.

If you use oxygen in your operations, LINDE SERVICE can mean dollar savings to you. Let us tell you more about it.

#### LINDE AIR PRODUCTS COMPANY

A Division of UNION CARBIDE AND CARBON CORPORATION
30 East 42nd Street III New York 17, N. Y.
Offices in Principal Cities
In Canada: Dominion Oxygen Company, Limited, Toronto

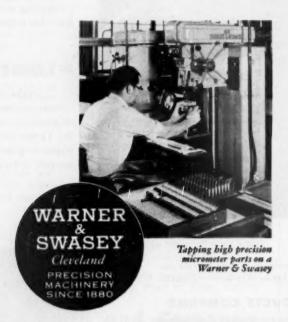


# More-money-for-less-work soon means <u>no</u> work

TALK OF A 35-HOUR WEEK (which some power-hungry "leaders" are promoting) is a fraud on the worker, unless greater production makes up for the shorter hours.

The price of anything is based on the sum of all its costs, and labor is the greatest part of those costs in most products. The less a man produces, the greater the labor cost of his product and so the higher the price. The higher its price, the fewer people there are who will buy it. The fewer who buy, the fewer workers needed.

So-a shorter work week, with its less production, can put men out of work.





. they keep a more uniform

intensity of fragrance.







How to turn the nose to "yes"

### with Atlas Chemicals -

Better smell usually means better sell.

Perhaps Atlas chemicals can help you, too, to put more "nose appeal" into your products. For experienced technical assistance, write or call Atlas today.



Hexahydric Alcohols • Surface Active Agents • Industrial Explosives Industrial Finishes • Leundry Covers • Acids • Activated Carbons







SOUTHBRIDGE, MASSACHUSETTS . BRANCHES IN PRINCIPAL CITIES

How about your company? Eye injuries are as certain as death and taxes unless there is a program that controls them. Ask your AO Safety Representative for complete details.

\*98% of eye injuries are eliminated when workers wear safety gaggles,

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### **BUSINESS OUTLOOK**

BUSINESS WEEK OCT. 3, 1953



You are beginning to hear more talk about a slight tapering in the activity of durable goods industries and of inventory reductions.

These always are difficult things to pinpoint at an early stage.

However, wobbly raw material prices tend to confirm the caution on inventory. Scattered layoffs indicate lower output in a few lines.

### Inventories long have been a source of concern to economists.

The Federal Reserve Bank of Chicago notes that "more than half of the \$10-billion gain in total output (annual rate) from the first to the second quarter was traceable to additions to business inventories."

Probing deeper, the bank adds that "almost half the rise was accounted for by producers of durable goods."

Even if accumulation doesn't turn into outright attrition, a mere slackening in the rate of accumulation would retard business.

Purchasing agents have struggled for years to bring steel inventories up to minimum operating needs. Finally, they are near success.

"The rapid . . . accumulation in all positions since that steel strike of 1952, coupled with the evident slowing or stopping of additions since midyear, suggests that supplies in the hands of consumers are close to balance," says the National Industrial Conference Board.

### Steel operations today reflect supply approaching demand.

Output for several weeks has been below capacity. The rate, generally between 90% and 95%, now averages the higher figure.

Such operations, presuming they include no demand for inventory, would indicate annual needs in excess of 110-million tons.

We can't be sure, however, that a mite isn't still being stocked.

Seasonal factors alone will curtail steel needs somewhat from now on (even though mills' operations presumably are presently keyed to orders already booked or in sight for fourth-quarter delivery).

Declining auto production alone could knock five points off the steel rate. In addition, you must count on some dip in building.

But Iron Age, for one, doesn't expect any more than a seasonal slide. It estimates the steel industry's third-quarter average operating rate at 91.6% of capacity, says the fourth will be off only a shade.

Here's the latest (and not unexpected) dent in steel demand:

This week brought layoffs, described as seasonal, in tinplate mills. Canning needs have passed their peak, and there is a fairly well substantiated suspicion of some overproduction.

Much stress now is being laid on the theory that expansion in soft goods is offsetting any slack in durables. In effect, this makes the following argument: No recession will go far so long as the consumer is so well heeled.

Such a pattern—booming soft goods against a slow decline in production of hard—probably will mark the last quarter.

### BUSINESS OUTLOOK (Continued)

BUSINESS WEEK OCT. 3, 1953 Soft goods thus will aid in maintaining employment and payrolls.

By bolstering purchasing power, nondurables can cushion a possible inventory adjustment in hard goods. Nevertheless, if stocks held by producers of durables prove top-heavy relative to sales, this will be felt.

Factory employment figures reflect some easing in durable goods.

This had not been too apparent earlier. One reason seems to have been that first reports to the Bureau of Labor Statistics overstated employment. Now, however, the revised estimates show a creeping downturn.

Factories turning out hard goods had 10.1-million on their payrolls in April and May. By August, the figure was a shade under 10-million.

The decline, to be sure, was tiny. It could be seasonal in part, and there may be statistical errors. But it will bear watching.

Most of the employment decline in factories turning out hard goods has been in the rather loose category of "transportation equipment."

Its drop of 80,000 (about 4%) reflects lower demand for trucks and railway equipment—plus military cutbacks on the plane program.

Even so, it provides 200,000 more jobs than a year ago.

Factories making soft goods now employ about 71/4-million people. That's only a little ahead of last year (compared with a gain of nearly 11/2-million in plants turning out durables).

However, the gain in soft goods might be larger if more hands were available. Manufacturers of durables have been getting more than their share of workers because their pay averages \$13 a week higher.

That helps explain why layoffs in hard goods haven't caused much unemployment. Jobs could be had in soft lines.

Factory payrolls will shrink a bit as efforts to cut costs eliminate overtime. It may not affect consumer income much, in the aggregate, but it can pinch the individual factory worker's spending.

That's the main significance of a decline from about 411/4 hours in a factory work week late last year to a 401/2-hour average now.

Look for the cost of supporting farm prices to soar.

The latest figure shows nearly  $$3\frac{1}{2}$ -billion tied up in such ventures. And that includes very little in the way of help on 1953 crops.

Heretofore, the talk has centered on the problem of this year's grain crops. But cotton shouldn't be forgotten; spot markets this week averaged slightly below the loan price.

Home building, despite its lagging tendency in recent months, will easily top the million mark again this year.

More than 740,000 dwelling units were started in the first eight months. If we do as well over the rest of the year as we did in 1952 (which is doubtful), the figure would reach 1.1-million.

But if we only match the slower rate of late 1951, this year's total still will be about 1,050,000.

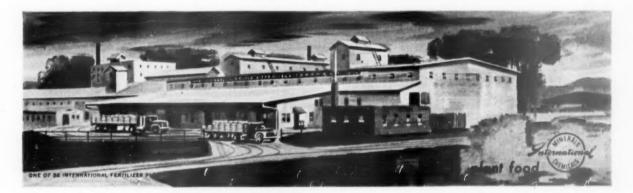
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OPERATING MORE THAN SEVENTY MINES AND REFINERIES,



CHEMICAL AND MANUFACTURING PLANTS IN TWENTY-SIX

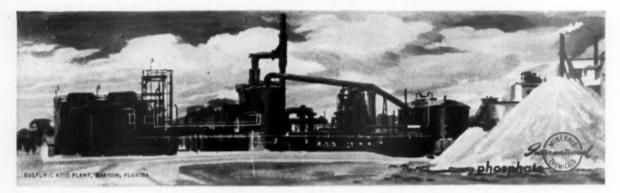


STATES FROM COAST TO COAST AND IN QUEBEC, CANADA

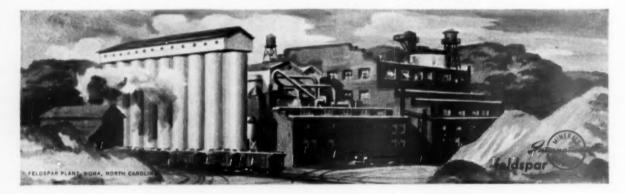




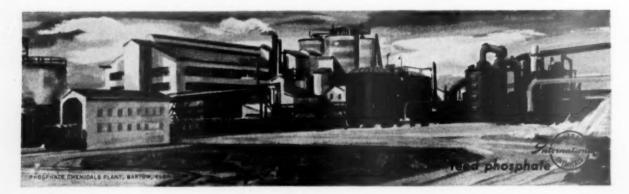
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PRODUCTION OF THE NATION'S FOOD AND A WIDE VARIETY



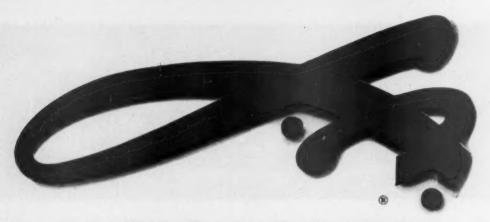
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# FIGURES OF THE WEEK

1923-25=100			19	23-25-1	00-
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1949 1950 1951 1952	PM	M	7 A 8	O N	130
	§ Latest Week	Preceding Week	Menth Age	Year Ago	1945 Averag
Business Week Index (above)	*255.6	†253.2	257.4	246.7	173.
RODUCTION					
Steel ingot production (thousands of tons)	2,139	†2,144 †146,912	2,040	2,195	1,28
Engineering const. awards (Eng. News-Rec. 4-week daily ay, in thousands)	140,678 \$53,288	1\$48,547	152,866 \$44,093	141,228 \$43,062	62,88 \$17,08
Electric power output (millions of kilowatt-hours)	8,354 6,486	8,395 6,495	8,540 6,621	7,625 6,507	4,23
Bituminous coal production (daily average, thousands of tons)	1,611	1,623	1,595	1,930	1,74
RADE					
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	79 59	76 58	77 59	80 65	8
Department store sales (change from same week of preceding year)	+6% 152	-11% 182	None 182	+1% 156	+309
RICES					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	409.3 82.1	411.8 83.2	415.6 85.4	427.2 97.4	311
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100). Finished steel, index (U. S. BLS, 1947-49 = 100).	95.8 141.7	96.6	95.2	91.5	1175
Scrap steel composite (Iron Age, ton)	\$31.50	\$35.33	\$40.00	130.8 **\$42.00	\$176 \$20.2
Copper (electrolytic, Connecticut Valley, E&MJ, lb.)	29.780¢ \$2.18	29.950¢ \$2.19	29.970¢ \$2.21	24.500¢ \$2.42	\$1.9
Cotton, daily price (middling, ten designated markets, lb.)	32.74∉ \$2.12	32.76¢ \$2.12	32.91¢ \$2.12	38.36¢ \$2.00	30.50 \$1.5
INANCE					
90 stocks, price index (Standard & Poor's)	185.6	183.1	187.2	195.7	135
Medium grade corporate bond yield (Baa issues, Moody's)	3.88%	3.88%	3.86% 23%	3.53%	3.059
ANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	52,801 78,916	53,527 79,482	53,330 79,301	52,990 76,488	††45,82 ††72,03
Total loans and investments, reporting member banks	23,035	23,295	22,891	21,782	119,29
U. S. gov't guaranteed obligations held, reporting member banks	31,393 26,228	31,604 26,464	32,005 26,131	32,127 24,857	23,88
NONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Averag
Average weekly earnings in manufacturing		\$71.69	\$71.51	\$67.23	\$43.8
Export (in millions)		\$1,346 \$908	\$1,377 \$934	\$1,027 \$839	\$8 \$4

Preliminary, week ended Scpt. 26, 1953.
 Basing pt., less broker's fee.
 \* Revised. ++ Estimate.

A Date for "Latest Week" on each series on request.

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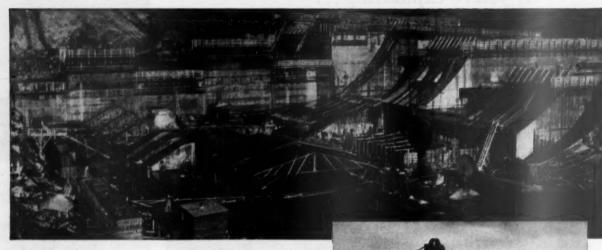
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### Will East and West Bury the Hatchet?

It's distinctly possible.

There are pressures in both the Eastern and Western camps for some kind of negotiated settlement.

Russia is no longer in a position to wage an aggressive cold war, as was the case in Stalin's time. The West, bothered by defense costs, is eager to make peace.

For the first time since the start of the cold war, world events have reached a stage where there's a possibility of a negotiated settlement between East and West. Forces at work on both sides of the Iron Curtain are pushing the world in that direction.

• Changing Shape—The world situation is not negotiable yet, though some European politicians seem to think it is. The Communists aren't yet ready to talk about settling big issues like Germany and Korea—except on terms that the U.S. and most of its allies will never accept. There is proof of that in the way Moscow has rejected the Western proposals for an October forcign ministers' meeting on Germany, and in the way it is still stalling the Korean political conference.

But there's no doubt that some weighty new factors have come into play in the East-West balance. They're weighty enough so that Washington as now taking its first real look at the problem of trying to negotiate a settlement with Moscow. This was the meaning of Secretary of State Dulles' speech to the United Nations.

There's no telling what the basis of such a negotiated settlement might be. Clearly it would have to involve disarmament. But first, it would have to include:

In Europe: on the one hand, Russian agreement to a unified and independent Germany, plus a relaxation of Moscow's control over the governments of Eastern Europe. On the other, a Western guarantee that neither Germany nor Eastern Europe would be pawns in an anti-Russian Western policy.

In Asia: on the one hand, agreement by Red China to keep peace in Korea and to halt support for the Communist Viet Minh forces in Indo-China. On the other, Western acceptance of Red China as a member of the United Nations and restoration of normal trade relations.

### I. Pressure in the East

Russia is in no position today to wage, let alone win, the kind of cold war that Stalin waged against the West for more than five years. The West's military position, especially in Europe and the Middle East, is strong enough today to make a return to Stalin's policy an impossible proposition for Russia. At the same time, Moscow is facing serious economic trouble at home and a potentially explosive situation in the satellite area of Eastern Europe.

The new Soviet regime is trying, of course, to make up for the losses it has suffered because of these two developments. It is doing a lot of diplomatic sparring in the hope of splitting the North Atlantic Alliance and of creating a new pro-Communist bloc in Asia. But it's now clear that the Kremlin's one hope of bringing the West to its own terms is to hang on to its power, both in Russia and in the satellites, until it has enough H-bombs to blackmail the West into agreement.

• Strength or Weakness—From the West's angle, this situation offers new possibilities for peace and new, terrible dangers. The hope is that disintegration within the Soviet empire will reach the crisis point before Russia has built an effective stockpile of H-bombs. Then Moscow would have to negotiate from weakness, without an overpowering blackmail weapon.

No one can be sure, of course, whether Russia can produce H-bombs fast enough to offset the political and economic weaknesses that have shown up since Stalin's death; or whether the

new Soviet regime will be forced to agree to a settlement first. But two things are clear:

• The agricultural crisis in Russia is so severe that Moscow is not only loosening up Stalin's agricultural policy (BW-Scp.26'53,p31), but is now diverting production facilities from armaments to farm machinery.

 Eastern Europe, especially East Germany and Czechoslovakia, is near the boiling point. Another explosion like the one that rocked the Soviet Zone June 17 could come this winter.

In combination, these weaknesses may well force Moscow to seek a settlement in Europe before long, perhaps even during 1954.

### II. Pressure in the West

If that's the case, you can be sure Washington will respond—and not just because of a desire to get out from under the shadow of the H-bomb. There are other pressures on U.S. policy-makers. In the U.S. itself, there's the mounting desire to cut down the defense burden. Typical of the U.S. approach are the twin goals of the National Security Council—security and solvency. There's no disposition now to build Western strength to a point where Moscow could be forced to unconditional surrender.

The reasons for this lie not only in pressures inside the U.S., but also in pressures coming from our allieswhich the U.S. can't ignore. Both Britain and France are pushing for negotiation with Moscow-partly for the same two reasons that motivate Washington's approach, and partly because both countries are now trying to develop independent foreign policies for the long haul. For example, in both London and Paris there's the feeling that a negotiated agreement on Germany is necessary to keep Germany from getting so strong that it will upset the power balance in Western Europe itself.

### III. The Shifting Balance

The fact is that as Western strength has grown relative to Russia's, cohesion within the Western camp has been loosening up. Whereas two years ago the U.S. was the unquestioned leader of what amounted to a wartime equaltion, our position today is more like that of the leading power in a peacetime alliance.

This doesn't mean there will be any letup in the U.S. drive to strengthen the defenses of the free world. And the strength of the base on which the U.S. is now operating is a key factor in the

present world situation.

• In Europe—Despite some setbacks in achieving the military goals of the North Atlantic Treaty Organization, the over-all defense picture has brightened during the past year. There has been a steady increase in NATO air power. Ground forces in Europe have been strengthened by the addition of atomic artillery.

There have been encouraging developments at a different level, as well. Early in September came the Adenauer victory in West Germany—which means that German armed strength will come into play soon, either through the European Defense Community or directly through NATO. Then, last week, the U.S. signed a pact with Spain, which greatly strengthens the U.S. strategic

position in Europe.

• The East—In the Middle East the Western position is much stronger today than it was a year ago. The Communist threat to Iran seems to be over now that Premier Mossadegh is out of office and Gen. Zahedi is in power. In Egypt, the chances look better every day for a British-Egyptian agreement on the defense of Suez. This means there's a pretty fair chance now that a Middle East defense system can be organized.

In the Far East, the U.S. hasn't gained in the way it has in Europe and the Middle East. But in a military sense the lines have hardened against the Communists. The big achievement this year has been the Korean cease-fire. Whether or not it leads to a Korean settlement soon, this is a major setback

for Moscow.

True, there has been no comparable success in Indo-China. But the U.S. is firmly committed now to preventing the Communists from taking over that part of the world. That commitment amounts today to about \$800-million a year in aid to French and Viet Nam forces and a sort of U.S. guarantee of Indo-Chinese independence. It might be extended to include direct military action if that should ever become necessary to hold Indo-China.

What's more, the United States is determined not to ease up the pressure on Red China until there are clear signs that both Peking and Moscow are ready to negotiate a Far Eastern set-

tlement.

This means that the U.S. will do its best to keep Red China out of the

U. N. and to prevent any relaxation of the present embargo on strategic trade with mainland China. As Washington sees it, giving in on these two issues would merely increase Red China's political leverage in Asia and give a lift to its sagging economy.

### IV. Stones in the Road

The U.S. still has problems in Europe and Asia—some of them arising out of our very success. And you can be sure that Russia will try to exploit these

problems to the full.

For example, Adenauer's victory has put German rearmament in the bag, but not without raising new doubts in France about the European Defense Community. As things look now the Laniel government (or any possible successor) won't be able to get EDC through the National Assembly unless it is also prepared to negotiate with Soviet Russia about the eastern frontiers of Germany. It's even possible that the Assembly will be offered a double package—(1) EDC, which will put German and French forces in a joint army, plus (2) a revival of the Franco-Soviet pact of 1945, which would guarantee France against the

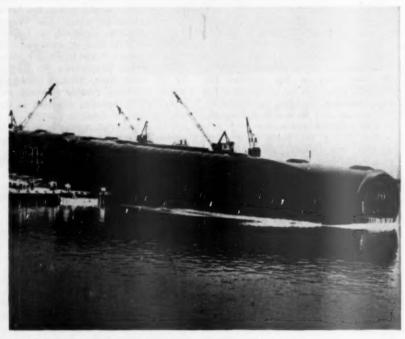
very country-Germany-it allied with in EDC.

You can be sure the Russians will maneuver to get such a policy adopted in France. Moscow has been playing on French fears of Germany for several months now. And so long as there's a chance to stymic EDC by one means or another, Moscow will stall on a German settlement.

• Asian Bloc?—In Asia, Washington is sticking by its guns on the Korean political conference. The U.S. insists that only nations that fought in the war sit in, with the Communists and the U.N. nations on opposite sides of

the table.

But this demand is giving the Communists a chance to play footsic with India. Moscow and Peking are now trying to build an Asian bloc, which would stand apart from the West on all Asian issues. The tendency toward a neutralism leaning toward Peking is already strong in India and Indonesia. If the Communists have any success with this project, they might be able to force a negotiated settlement in Indo-China. In any case, they are likely to stall any negotiations for an Asian settlement as long as their game seems to have a good chance of success.



### A Tunnel Floats through Texas

About 300 ft. long and 35 ft. in diameter, the huge object floating smoothly down the Sabine River in Texas is one of nine sections of a new ½-mi.-long highway tunnel that will link Baytown and La Porte, Tex. (BW-Apr.22'50,p73). The towns are on opposite sides of Galveston Bay right

outside of Houston. The tunnel sections were constructed on land at the United States Steel Co.'s plant at Orange, Tex. Completely encased in giant steel tubing and bulkheaded, they were launched from the plant shipways on their 125-mi. trip to the tunnel site at Baytown.

### Autos: the Dump and Discount Blues

Dealers find that there's still an enormous market for new cars. But . . .

To sell a car today, you have to offer either a high trade-in allowance or a straight price discount—plus all sorts of extra concessions.

And to make room for next year's models, you may have to dump 1953's leftovers at a loss.

Last week, a prospective car buyer named S. S. White strolled into the salesroom of Mecklenburg Motors, Inc. (Charlotte, N. C.), leading a billy goat on a rope. "I want a 1953 Mercury," White told the salesman. "What'll this goat get me as a trade-in?"

The salesman looked the goat over, noted that it was in good condition, conferred with the manager, and stated a price: \$640.87. Shortly afterward, White drove off in a new Mercury.

• For a Song—This was more than just a whacky publicity stunt. Mecklenburg was ready to do almost anything that would sell cars. And new-car dealers throughout the country, Business week reporters found this week, are in the same mood. They're offering oversized trade-in allowances, tremendous discounts. They're running loud, full-page newspaper ads; staging night-long sales at which customers are assured that "no reasonable offer" will be refused. Caught between the pincer jaws of booming supply and lagging demand, dealers are working furiously to keep the cars moving.

A Los Angeles dealer, for instance, ran a one-day sale at which he allowed himself a profit of \$1 per car. A Plymouth dealer in Cleveland put a trade-in value of \$1,050 on a 1949 car, is now ready to sell it for \$750. Dealers in Detroit are giving straight discounts of as much as \$500 off new-car list prices. Dealers everywhere are offering to arrange, and pay for, the legal manipulations that go with buying a carregistration, inspection, transfer of title, and the like.

• The Finger—The blame for all this trouble, dealers say, goes to the tremendous output of Detroit auto makers.

"With 6-million cars and 5-million customers," a San Francisco new-car man explains, "something has to give—the dealer."

Many car men will get more specific than that. Much of the trouble, they'll tell you, stems from the hot competitive battle among manufacturers—especially between Ford and Chevrolet. "If they'd quit trying to produce for that No. 1 spot," laments a Houston dealer, "we'd all breathe a lot easier."

Car men complain further that manufacturers aren't absorbing their share of the punishment that must go with any such big-scale war. "All Detroit had to do is dump 100 cars on me," says one dealer. "That's easy enough. But me, I've got to go out and sell them." What's more, the complaint continues, there has been no recent price cut at the manufacturers' level. Any price-cutting has to be done by the dealer. It's his profit margin, not the manufacturer's, that's shrinking.

 Results—The upshot of all this is that the dealer's sales volume is high, his profit per unit low, and his inventory growing.

A Buick agency in Pittsburgh tells a fairly typical story: Its sales are running about 20% ahead of last year's. But its profits are up only "fractionally." Like other agencies, it has had to lean over backward to please its customers—give each buyer, in effect, a knockdown of several hundred dollars.

Despite the fact that dealers are selling cars furiously, most of them are having trouble keeping ahead of Detroit. A Texas dealer, for example, reports that he received 200 cars in August, sold enly 120. The next month's allotment, added to August's leftovers, gave him 280 cars to sell in September. "They aren't like cereal," he says morosely. "You can't eat them."

• The Rack—Nor can a dealer eat the used cars he accepts as trade-ins—and this makes the situation even worse.

When output is high and dealers are forced to allow heavy trade-in values, more and more consumers are induced to buy new cars. This puts huge numbers of used cars on the market; the prices of used cars go down.

Hence, the new-car dealer finds himself on a sort of economic rack. While the prices he must allow on trade-ins go up, the prices he gets when he resells them go down. A dealer in Cleveland found this to be the case when he allowed \$1,050 on a 1949 Plymouth. Trying to pass it on to a wholesaler, he was offered \$450.

• Cousins—In the same whirlpool with the new-car dealer is his cousin, the used-car man. About the only difference between their two forms of trouble is that the used-car dealer, less hedged about restrictions, can thrash about a little more freely to keep his head above water.

At the end of every model year, the new-car man has to clear his floor to make room for next year's models. In a year of heavy supply, he often has to resort to "dumping" the expiring year's cars at extremely low prices—even at a loss. In almost every city this week, you could hear angry dealers charging their competitors with dumping.

While used-car dealers are affected by the changeover in models, the problem isn't nearly so sharp with them.

 Price—Another restriction that's stronger on the new-car dealer is that of price. While new-car prices are fairly standard, used-car prices can vary tremendously.

Hence, a used-car dealer can often make money where a new-car man can't, simply by twisting and turning a little. Say he has a 1949 Ford in fair condition on which he hopes to realize \$850. A customer drives in with an ancient Buick worth perhaps \$100.

In times of heavy supply, the cagey customer will insist that his Buick is worth \$200. What does the dealer do? He simply states the price of the Ford at \$950, generously gives the customer his \$200, collects \$750 in cash, and sells the Buick for the \$100 it's worth—thus realizing his expected \$850.

A new-car dealer can do this to a certain extent, but he can't push it as far as his cousin.

• Way Out?—The embattled new-car dealer has three hopes for release from his troubles: He hopes that manufacturers will cut (1) output or (2) prices. But he places most of his faith on (3) hard selling.

hard selling.

Most old-time dealers figure they can sell their way out of the present situation, even if it lasts through 1954—as many expect. Though it'll mean highpressure campaigns and low profit margins, most dealers think they'll sell as many cars next year as this year.

"People have the money," one dealer says. "If you fight for it, it's yours." His fighting words are backed up by the experience of a Washington (D.C.) dealer. During the course of a big one-day sales drive, the dealer sold 57 new Mercurys and took orders for 87 more. Only 22% of the sales were on an installment basis; all the rest were cash.



BARGAIN HUNTERS line up under police guard waiting for Manhattan cut-rate store S. Klein to open its huge diamond sale.



BIGGEST HIT of array of over 100,000 diamonds were loose stones for rings, which Klein's custom-mounted.



BALLYHOO aplenty tickled Klein's. As expected, the sale generated a spate of publicity.

## A Bargain Basement Moves a Batch of

S. Klein, perhaps the most famous cut-rate, cash-and-carry department store in the country, holds that there's more money around than most retailers think—if retailers will just go after it. This week, the Manhattan store got a chance to test its theory—and to get itself some splashy publicity—when it gave a sheer luxury item the bargain-basement treatment.

At 9 a.m. on Monday, Klein's opened the doors of its big store on Union Square for a mammoth diamond sale. The bargain bait was more than 100,000 sparklers the store had come by in a special cash deal with an old-line Manhattan wholesaler. The batch, worth well over \$\frac{1}{2}\text{-million, included mounted and unmounted stones priced from as low as about \$5\text{ to \$131,000}

for a perfect, 22-carat, emerald-cut gem.

• Diamond Hunt—Following the scent of a two-page newspaper spread, crowds of more than fifty at a time lined up all through the day in the roped-off, police-guarded entrance, stood three deep at the counters when their turn came to go in. While a few men cautiously examined goods, young couples excitedly fingered engagement and wed-



INDEPENDENT APPRAISERS reassured, found prices 15% below normal retail.



CASH layed out affirmed Klein belief that the money was there for luxuries.

### Diamonds

ding rings, and a host of women of all ages—many of them well-dressed and a couple even chauffeur-driven—picked up fancy trinkets they'd always wanted or just couldn't resist at Klein's prices.

By the end of the day, drooping

By the end of the day, drooping Klein's cashiers had rung up sales of thousands of diamonds, most of them in the \$400-\$600 class. There were even nibbles on the \$131,000 job.







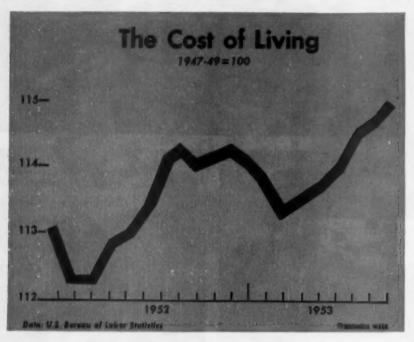








WOMEN of all ages and economic groups dominated crowd, reaching for fancy trinkets they'd always wanted or couldn't resist at Klein's prices.



### Why Doesn't It Drop?

Probers seek political hay in rising living costs, despite cheaper raw materials. Actually, the c-of-l is behaving as might be expected.

It's hard to explain standpat meat and grocery bills to a consumer who has heard that prices are declining. He wants somebody to do something something like Secretary of Agriculture Ezra T. Benson's new investigation of the food processing and distribution industries.

That's why the headline potential of such an investigation won't be found in the sober economic fact that the cost of living has actually been acting about as you might have expected.

Éver since President Eisenhower took office, the cost of living has behaved almost perfectly, in the eyes of his new businessmen administrators. The c-of-l has been inching up just enough to indicate a busy economy, and not enough to cut markedly into the value of the dollar.

• Not Enough—This week the people who were proudest of the performance learned that it wasn't good enough. Politicians began to worry about a question that had been bothering housewives and some business analysts for months. Why should the cost of living go up at all, in a period when raw material prices are going down?

In particular, why should the cost of food go up 1.9% in the August cost-of-living index, when prices received by farmers have been declining for more than a year?

The Bureau of Labor Statistics, which prepares the index, had an answer. But it wasn't the kind of answer to fend off Benson's investigation of processors and distributors. Neither was it enough to still the rumblings of Rep. Clifford Hope's touring House Agriculture Committee. Committee members let it be known that they were planning their own investigation of why retail food prices weren't following farm prices down. They implied that if Benson didn't proceed rigorously enough to suit them, they would hold their own hearings.

• Happy Humphrey—On the other hand, what BLS had to say was pleasing to Treasury Secretary George M. Humphrey, who seizes every chance to defend the way that the cost of living has crept upward. Humphrey points out that each move up is in itself so small as to amount to stability for all practical purposes.

BLS technicians say the same thing. Every month the agency checks the cost of basic items to families with incomes in the labor and clerical category. Last August, prices were only .7% higher than a year before. One BLS statistician said, "That's just plain stability."

The picture is a little different if you look back to February, the first full month of the Eisenhower Administra-

tion: Since then, the cost of living has gone up 1.6%-still a narrow rise, but one that would amount to 2.7% a year if maintained for 12 months. That's almost four times as fast a gain as that for August-to-August.

• Escalators—Gains of that magnitude would have a sizable impact on wage levels—pulling pay up for some 5-million workers directly or indirectly through escalator contracts.

The addition in living costs so far this year has brought one small round of increases. But the boosts were big enough to suggest that automatic raises may be tending of themselves to keep living costs inching upward.

living costs inching upward.

• Explanation—BLS has another concern. With many signs of a downturn appearing in the economy, the question naturally pops up: Is the cost-of-living index going the other way because it is faulty? BLS experts say no. And they give this explanation:

In the course of a year, the price of food has gone down 2.5%. The price of clothing has dropped a bit, too. Both these items stem back to raw materials, which have been declining in price. Now, if the entire list of items in the index had followed food and clothing, living costs would be down.

Instead, every other major category on the index has gone up—housing, transportation, medical costs, personal care, reading and recreation, tobacco, and liquor.

The index has moved up over the 12 months because the costs of housing and services have risen enough to wipe out drops in food and clothing. Housing and services, BLS experts point out, have no direct connection with raw materials prices. Agricultural prices could drop for a long time without having any direct effect on transit fares in New York—which rose enough in August to cause a jump in the whole transportation category on the index.

What has been happening is that rent—out from under controls completely since July 31—and the cost of services have been catching up with the general Korean price rise. Controls kept a lid on rents. And services traditionally move more slowly, pricewise, than food and clothing. So it's a case of one group of living costs coming down, meeting another group still rising, with the net effect on the upside.

• Short-term—The trouble with this picture is that it's good only if statistics go back a year. Since February, food has been going up steadily along with everything else except clothing. In fact, the rise in food is the largest of all—2.6%—and that puts the Administration firmly on the hook, politically.

In food's latest rise-recorded in the index for August-beef is clearly the culprit, with an increase of 6%. That makes the packers a natural target for

Benson's investigation, and for mutterings from the farm politicians in Con-

gress.

But concentration on meat will hide the underlying characteristic of the entire price movement: its broad base—the general nature of the creeping advance. Practically everything is going up a little, practically nothing is coming down. That's true even inside the food category. Fruits and vegetables were down seasonally in August, for example, but every other food class was up—eggs, lard, coffee, fresh milk, and bread, notably.

There's no particular seasonal drop in the picture over the next few months, as BLS technicians see it. This, combined with the broad rise in the cost of housing and services, indicates further notching up over the next several months. But with movements as small as those currently being recorded, this is mostly guesswork.

corded, this is mostly guesswork.

• Well-plowed Field—Few people in Washington or in the meat packing centers expect Benson to turn up anything new. This is a well-worked field—inquiries into packers' spreads and distributors' markups are a regular part of the Washington scene.

No matter what Benson's experts find, it probably won't sooth farmers very much. Cattle prices have slumped



### High Court's New Chief

The liberal wing of the Republican Party got a boost this week when President Eisenhower picked one of its top political figures—Gov. Earl Warren of California—for the job of Chief Justice of the Supreme Court. The favored candidate, Warren built up a long legal background as a prosecuting attorney and as attorney-general of California before the three four-year terms as governor that made him a national figure. The appointment completes the court's membership in time for the session starting

off around 30% under a year ago. In the same period, the meat category on the BLS index dropped 5.3%.

When its study is completed, the Agriculture Dept. is likely to locate most of the explanation in the natural

time lag between stockyard and retail prices, plus high fixed costs all along the packer-to-butcher pipeline. But this doesn't add up to an attractive political package, so it won't end the matter.

### Greyhound Its Own Master

Bus company is buying out railroad interest in its operating companies. It's all part of a streamlining program for economy and aggressive promotion.

Greyhound Corp. of Chicago is flexing its muscles for a determined grab at a bigger and more profitable share of the nation's passenger traffic.

For a starter, Greyhound is buying its way out of its old 50-50 partnerships with railroads whose tracks parallel its routes. The bus company is already picking up the interest of the Pennsylvania, the Great Northern, and Southern Pacific in its operations. Other deals are on the fire. The idea is to give Greyhound 100% control of its operations in all parts of the country.

Once it has all its subsidiary operating branches under one tidy control, Grevhound proposes to streamline accounting and other practices, with healthy savings in sight. At the same time, a more aggressive hunt for the clusive passenger will be possible. Grevhound is very conscious of the need to do something about rising costs, plus the increasing encroachments of private cars on short haul passengers, and of the airlines and railroads on the long hauls. • \$25-million Loan-First move in the tightening-up program is the borrowing of \$25-million to buy out the railroads. Of this, about \$8.5-million goes to the Pennsy for its 50% interest in the highly profitable Pennsylvania Greyhound lines.

The union of the Pennsy and Greyhound came about when the railroad's wholly owned bus operations around Philadelphia were extended to Pittsburgh in 1930. At that time, Grevhound was pushing out of the Midwest toward the Atlantic Coast population centers. Competition was averted when each company bought a half interest in the other's bus operation. The deal has been consistently profitable for both, but created considerable friction. · Irritations-Managing the lines has been a tightrope-walking job for Swan Sundstrom, who joined Grevhound as a school bus driver in 1916, and has been boss of Penn Greyhound for 22 years. The fact that all receipts had to be banked by the railroad, and that the Pennsy had to O.K. all spending and salaries, was galling to Greyhound. So were the second-rate quarters that it often received in Pennsy railroad stations, though the bus line was frequently glad to have the facilities. A horrible example of this, to Greyhound, was the fact that its buses were kept at the beat-up Broad Street Station in Philadelphia till it was torn down. Even then, the buses were so skimpily lodged at the 30th St. Station they needed signalmen to guide them out.

Operational advantages to be gained by consolidation make these irritations seem mere gnat-bites. By picking up the Pennsy share, and by buying Blue Ridge Lines from Potomac Edison for about \$2,250,000, Greyhound secures 100% ownership of all Greyhound operations in the East. As a result, it should be possible to eliminate some local operating companies. The New England companies, good feeder lines but not consistently profitable, can now be merged into Penn Grevhound, which will encompass all operations east of Cleveland. At the same time competition for long haul passengers will be eliminated between Penn Greyhound, Central Grevhound, and Blue Ridge.

All sorts of tidy savings are in sight. For example, the line believes it will knock 15% off ticket accounting costs. • Further Plans-Plans for similar clean-ups in other parts of the country are still in the blueprint stage. Eventually, the present 17 operating com-panies in the U.S. may be merged into seven or eight. In the long view, Penn Greyhound may take in all lines from Washington west to St. Louis and north to Chicago. Southeastern Grevhound can absorb Florida. Along the Mississippi, the Illinois, Dixie, and Teche lines would merge naturally. So would Southwestern Grevhound, and Pacific Greyhound, with the Southern Pacific RR out of the picture.

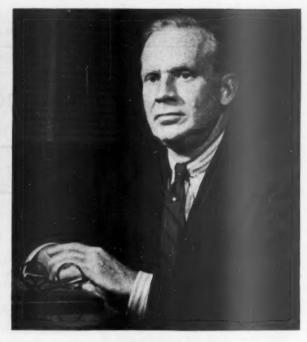
Along the same lines, if plans mature for buying out the interest of the Richmond, Fredericksburg & Potomac RR in Richmond Greyhound, it will be possible to lump Richmond with Capitol and Atlantic operations.

There is little doubt that the Interstate Commerce Commission will approve Greyhound's buying out of the railroads. ICC asked the rails to dispose of their interests several years ago.



Labor Press Associates-Bernard Seaman

LABOR BUGABOO Secretary Durkin's angry resignation leaves unions afraid Eisenhower is swinging against them on Taft-Hartley amendment.



MANAGEMENT BUGABOO Bernard Shanley and other White House staffmen, employer groups suspect, are pushing labor views.

### White House between Two Fires

The furor over Labor Secretary Martin Durkin's resignation because of disagreement with President Eisenhower over proposed Taft-Hartley amendments has had this result: Both management and labor men now are seared about what will happen to the labor law.

So both are bringing their guns to bear on the Administration—and the White House—to try to make the end product come out as they want it.

Earlier each side was confident the Administration would do right by it; now both are in a quandary. And the fears of each side have a personal tinge. Labor leaders are afraid the new secretary may be unfriendly, may doom any labor-sponsored amendments. Management's hobgoblin is the President's special counsel, Bernard M. Shanley: They blame him for the pro-labor coloring of the tentative White House message containing Durkin's 19 proposed Taft-Hartley amendments.

• Worriers—There's a third group that's worrying, too. Republican politicians are concerned over the possibility of failure to get any amendments, or the right kind, through the next session of Congress. Eisenhower promised to improve Taft-Hartley. Failure would leave Republican candidates vulnerable to attack by labor and the Democrats. And it would take the loss of only a

few seats to cost the Republicans control of the next Congress.

These Republican worriers fear that all the pulling and hauling between now and next spring may keep Congress from voting any amendments at all. Some Taft-Hartley supporters would prefer this. But so would those union leaders who would like to keep T-H as a campaign issue in the 1954 elections.

• Pressure—Strategists describe attack as the best defense, and psychologists say fear breeds an impulse to attack. So business organizations have intensified their campaign to prevent major overhauling of the T-H statute, at least along the pro-labor lines of the 19 amendments. And labor leaders, spurred by their fears and encouraged by the narrow margin by which the 19 changes failed to become Administration policy, have raised their demands.

Both sides interpret Eisenhower's statement on the Durkin incident as opening the door to labor and management efforts to get their views to him.

The two sides see the open-door invitation in the President's statement that he would send "my own suggestion" to Congress at its opening session in January—and that they'd be based not only on recommendations of the White House group but also on such

other recommendations as he might get.

• Labor—Just how much organized labor will do in trying to influence the White House position on T-H will depend largely on who is named Secretary of Labor. If he's another labor leader, or is friendly, labor will show more interest than if he is neutral or hostile. Whatever comes out of the White House will be measured by Durkin's 19 amendments.

• Business—Taft-Hartley supporters, largely business groups, have taken the Durkin episode as fair warning. Even if the 19 amendments were only a "working paper" as the White House said, business is disturbed that even a working paper could be so heavily weighted in labor's favor. That's why the more conservative T-H supporters in industry are reportedly out to "get" Shanley, holding him responsible for yielding to Durkin's proposals.

Business groups have undertaken a campaign to bypass the White House staff and get their position before Eisenhower himself. They're working through Cabinet members who have the President's ear. Chambers of commerce and trade associations are flooding the White House, Cabinet members, and Congress with letters and telegrams urging Taft-Hartley changes proposed

by industry.

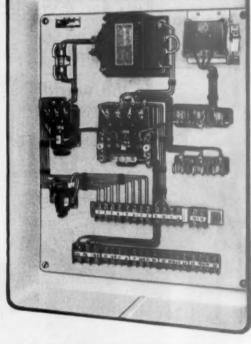
## OSBORN ROTO-CORE

#### operated by Allen-Bradley control

High rates of core production have been made possible through the use of the Osborn Manufacturing Company Automatic Indexing Turntable Core Blowing Machine. This is an example of another manufacturer that has standardized on Allen-Bradley control.

Allen-Bradley controls—proven reliable over the last 20 years and longer—have become the choice of discriminating machine tool and equipment builders. Allen-Bradley solenoid starters have only one moving part . . . and, therefore, assure the greatest degree of reliability. These controls can be depended upon for millions of trouble free operations. In addition, Allen-Bradley double break, silver alloy contacts are always in perfect operating condition—they require no maintenance.

Specify Allen-Bradley. You cannot go wrong!





#### The most

#### migratory bird in the world!



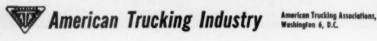
Ask the man who helps feather millions of new "nests" a year-Americans are the most restless people on the face of the earth! Millions changed their residence in the war years. U. S. census reports show that in every year since 1947 an average of 29 million\* Americans have begun the year in one house and ended it in a different one!

This movement means the shifting, far or near, of millions of families, with everything they treasure - pitchers to pianos. And moving means movers, and their motor vans, the "magic carpets" from here to there, anytime.

If you should want to join the migration-for a better job in a distant city, for new opportunity anywhere in America-isn't it a comfort to know the movers will be ready to help you?

The reasonable cost, good service, and direct delivery of motor car-riers, plus the careful handling your belongings will get, mean you are less tied down to one job, one spot, than ever before! The moving van is just one more symbol of the indispensable service that all the trucking industry gives you every day. If you've got it-a truck brought it!

e: Bureou of the Census, U. S. Dept. of Com-



#### **BUSINESS BRIEFS**

Excess oil: Louisiana took a second cut from its October allowable, for a total reduction of 75,000 bbl. a day. . . . In another sign of oversupply, Sunray Oil Corp. decided to reduce its crude oil purchases in Oklahoma by 25%.

And excess gasoline: Price wars that have been flickering around the country flared in the New York metropolitan area when some 70 New Jersey retailers hacked prices by as much as 7¢ a gal.

Plaskon division of Libbey-Owens-Ford Glass Co. will be bought for cash by Allied Chemical & Dye Corp. No price has been announced. The deal means that Allied, a producer of basic chemicals, will expand widely its activities in the plastics field.

Those new Treasury notes, Series C. which may be used for tax anticipation (page 43), shave the yield to investors to 1.56% if held for six months. Another sign of easier money came this week when dealers shaded their interest rates on business borrowings by means of commercial paper.

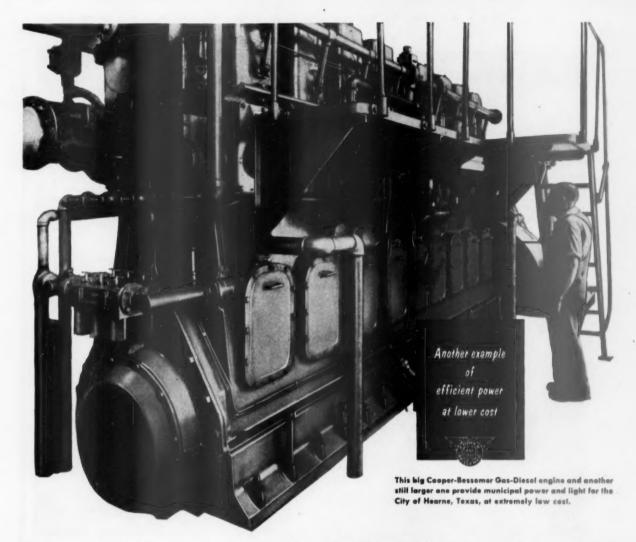
On-again-off-again: Small Business Administration has decided to charge a flat 6% on direct loans. That's 1% above the old Reconstruction Finance Corp. rate. Last week, SBA made the same decision, and then reversed itself for a while (BW-Sep.26'53,p136).

A very sharp lead pencil won the \$15-million Indiana & Michigan Electric Co. bond issue for Union Securities Corp., and its associates. Union's proposal-101.614 on a 31 coupon-topped the Halsey, Stuart & Co. group's bid by only 4¢ on a \$1,000 bond. That works out to just \$600 for the whole same issue.

B-52 jet production will be speeded up by the Air Force. Boeing Airplane Co. will tool up its Wichita plant, to supplement Seattle production of the eightet bombers. The Air Force also plans "accelerated production" of the North American F-100 jet fighter.

Pipeline for defense: The Petroleum Administration for Defense has urged building of new lines to carry 940,000 bbl. of crude a day to the East Coast from Texas and the Middle West.

100% stock dividend on its common has been declared by Hygrade Food Products Corp. The dividend, set for Oct. 29, follows Hygrade's absorption by merger of Kingan & Co. Inc., a meat packer.



#### How this DIESEL takes a city SWIMMING and GOLFING!

THE citizens of Hearne, Texas, know what it means to have their own municipal power plant, powered by modern Cooper-Bessemer Gas-Diesel engines, running almost entirely on natural gas at the highest efficiencies known today.

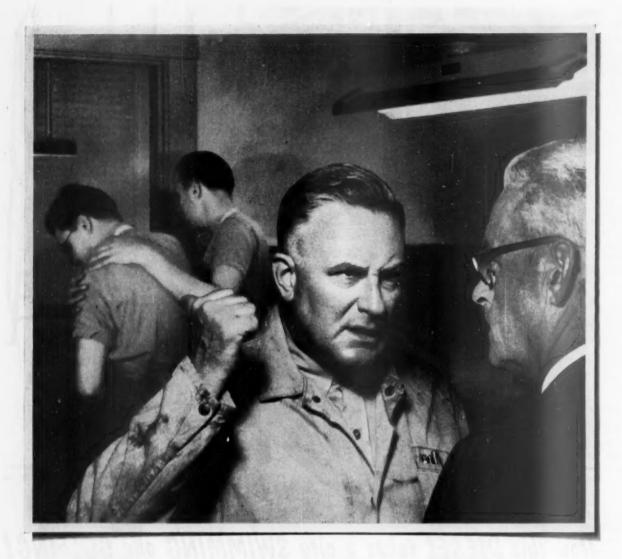
While giving them power and light at normal rates, this combination actually produces 64% of the city's total revenue and is responsible for low property taxes. In addition, the plant's revenue has largely defrayed the cost of a 92-acre park, a golf course, fully equipped club house and a big swimming pool with bath house, to say nothing of absorbing the cost of lighting schools and streets.

Quite a break for the people of Hearne? Sure, but today it's common where wise city planning can team up gas fuel with modern Gas-Diesel engines. Cooper-Bessemer developed and introduced Gas-Diesels only a few years ago . . . and they were money savers right from the start. Since then there have been constant improvements for ever greater benefits and economies.

It's pretty good evidence that regardless of your heavy-duty power needs, stationary, mobile or marine, it will pay you to check on the new things being done by one of America's oldest engine builders.

COOPER-BESSEMER
Greve City, Pa.

New York • Chicage • Washington • San Francisco • Los Angelos • San Dioge • Houston • Dellas • Odesse • Pampe • Greggton • Seettle • Tutes • St. Louis • Gloucester • New Orleans • Shraveport Conser-Bessemer of Canada, Lid., Hallifax, N. 5.



#### "HE RUINED OUR RECORD . . . AGAIN!"

The foreman was fed up. This was Charlie's third accident so far this year, and once more the department safety record was spoiled. "He just can't keep out of trouble," wailed the foreman.

But the plant doctor found out something the foreman didn't know, When Charlie recovered, the doctor asked him, "How long have you been wearing those glasses?" Charlie guessed about six years. He was referred to an oculist and new glasses were fitted. His run of "bad luck" stopped.

An accident repeater (like a "slow" youngster in school) may be blamed for carelessness when his real trouble is faulty vision or some other defect which might be easily remedied. Spotting these faults, and curing them be-

fore they cause expensive accidents, is part of the job of Industrial Preventive Medicine.

In Liberty Mutual's Humanics program, Industrial Preventive Medicine is only one part of a three-pronged attack on all the causes of accidents. The others are Industrial Engineering and Industrial Hygiene. But there is more to Humanics than prevention. If an accident should happen, Claims Medical Service works to reduce pain and loss. And Rehabilitation helps restore the badly injured to normal living

and working.

Humanics is good business as well as good human relations. It cuts the cost of workmen's compensation insurance. It improves production. It reduces suffering for workers and their families. It has saved money and manpower in businesses like yours. You can secure further facts through any Liberty Mutual office. Just look in your telephone book for the one nearest you. Or write to us at 175 Berkeley Street, Boston 17, Mass.



#### WASHINGTON OUTLOOK

WASHINGTON BUREAU OCT. 3, 1953



No easy money policy is imminent, despite all the speculation. The Federal Reserve Board has been under pressure to inflate the supply of funds that banks can loan. It kicked the idea around for several weeks. But its decision is that nothing drastic is necessary at this time to maintain a strong and stable economy. So:

No cut in required bank reserves is in sight. A cut in reserves is the surest way the Fed has to boost the amount of money banks may lend—and thus head off a recession. But the Fed feels no such action is needed now (BW-Sep.26'53,p200).

No cut in the rediscount rate is in sight, either. A lower discount would make it more attractive for banks to sell loan paper to the Fed and get cash for further loans to business, home buyers, etc. Feeling among board members is that this stimulant isn't necessary.

The policy still is to stabilize credit. The board plans to see to it that business can get cash to meet seasonal and growth demands—but without making money so easy that it encourages inflation or so tight that it invites a general business letdown.

Here's the background on the Fed's position: Credit tightened hard in the spring. That was deliberate—to hold down inflation. In the late spring and early summer, there was worry over a recession, brought on by the "hard money" policy. In June the Fed cut required bank reserves. This brought an easing. But in August there still was fear of too little credit. The Fed considered another cut in bank reserves. But there has been relief in September. Credit demands haven't been up to bankers' expectations. Also, the Fed bought government securities in the market, which is a way of pumping up loan money in banks. And as a result, credit is more plentiful than was expected. The Fed will be more liberal later if there's a new tightening. But for now it will sit tight.

As you look ahead on business, remember government spending. The government still is the biggest single customer of business and industry.

A new federal budget now is in the mill for the 1955 fiscal period (which starts next July 1). And whether you sell to the government or not, the level of government buying will influence your business. Final figures on what the government will do won't be available until next midyear. But you can begin now to anticipate the trend.

Start with revenue for next year. The official figure is \$60-billion plus, after tax cuts.

Noncefense spending (including foreign aid, atom bomb development, etc.) will run at least \$27-billion, maybe a few billion more.

Defense spending is being planned at about \$40-billion. That's less than this year's \$42.4-billion. It probably will be cut down even more before it clears the Budget Bureau and President Eisenhower. The range most talked is about \$38-billion to \$40-billion.

That will leave a \$5-billion to \$7-billion deficit unless taxes are raised, which is unlikely. A deficit is a stimulant. Republicans can deplore it. But they can't end it soon.

Government reorganization got a real boost this week when the new Hoover Commission held its first meeting.

#### WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU OCT. 3, 1953 The target this time is functions. The old Hoover Commission proposed many changes to streamline the form of government (most of them have been adopted). This commission will seek money savings. It's a new approach. And it may bring major policy reversals by taking government out of business.

You will get better gasoline for your car in the immediate future. PAD—Petroleum Administration for Defense—has suspended its order prohibiting use of alkylates in motor gasoline because of aviation demands. The Air Force can't find places to store what it has ordered. And besides, alkylate production facilities have increased faster than the government figured. So the gasoline octane race will now be wide open.

Construction will slide next year. Guesses by private and government experts all are in agreement. A quick rundown:

Private home building, about \$11.7-billion this year, will be off—but by only around 5%. That means continuation of the home-building boom.

Public housing, \$560-million this year, will be down 40% because of economy measures.

Private industrial construction, now \$2-billion plus, will be off 10%.

Atomic energy, \$1.9-billion this year, will also be off 10%.

Commercial construction, currently \$1.6-billion, will be up 10% next year.

School building also will rise 5% to 10% above this year.

Hospitals will be down 10% to 15% from this year's \$600-million.

Utilities—rails, gas, electric—will be slightly over this year.

Highways, sewer, and water will be up, too— about 10% on the average.

It still looks like big construction, on balance, a big economic prop.

Warren's appointment: The new Chief Justice based his political career on the promotion of social welfare, which gave him Democratic strength, too, in California. Conservative Republicans disagreed with him, but couldn't get the party leadership. To Eisenhower, Warren is "middleway" in politics.

California GOP politics will now shift to the right. Lt. Governor Knight is a conservative. With Vice-President Nixon supporting, he will try to keep party leadership in the state from Senate Leader Knowland, a Warren ally.

The sales tax issue was too hot. There's no doubt the Treasury wanted to try it as a money raiser. But the Democrats were lining up solidly against any such scheme. The GOP itself was split. So Eisenhower stepped in and knocked the whole idea out.

Chances for a new war in Korea are slim. The Reds are making it tough for us to agree on peace talk agenda. But we will make even more concessions. The reason: If war is resumed, it won't be limited to conventional arms. This could touch off World War III. Washington will lean over backward, hoping the voters will understand what's at stake.

Contacts correlated under the general correlate on the Oct. 3, 1663, 1600- Business week, 200 W. 42ad \$2., 1600 York, N. Y.



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PRACTICAL IMAGINATION THAT BRINGS YOU THE GOOD THINGS FIRST. Chrysler Corporation pioneered, for quantity car production, the hemispherical combustion chamber engine. This superior, deep-breathing, high efficiency engine has enough reserve power to handle with ease rugged terrain like that found along the California coast's U.S. Route 50, which is pictured here.

What's happened to automobile engine design?

At Chrysler Corporation, something spectacular! America's most advanced car engine, the V8 hemispherical combustion chamber design, is already turning gasoline into power more cleanly, more efficiently, than any other power plant for passenger cars.

This extraordinary engine, which is now being enjoyed by Chrysler, De Soto and Dodge V8 owners, actually breathes deeper through the wider, straighter fuel passages. Valves are larger, open wider. Spark plugs fire directly above pistons. So efficient is performance that the engine doesn't "carbon-up" with resultant power loss and costly repair bills.

This design is so inherently "right" that, with minor modifications, its range can be extended enormously. One test version turns out 309 horsepower – without supercharging, without boosting compression, without superfuels.

Another version, with fuel injection and air intakes in place of carburetors, developed 404 horsepower, and has now gone beyond that.

Chrysler Corporation engineers, however, are not interested in power for power's sake. They are interested in the performance of your car today. And tomorrow. They engineer superb performance into Chrysler-built cars by putting power in proper balance with car weight. Result: you get spirited getaway, economy of operation,



Cutaway of Chrysler-built V8 engine showing (1) dome-shaped chamber, (2) bigger, high-lift valves, (3) wide fuel channel.

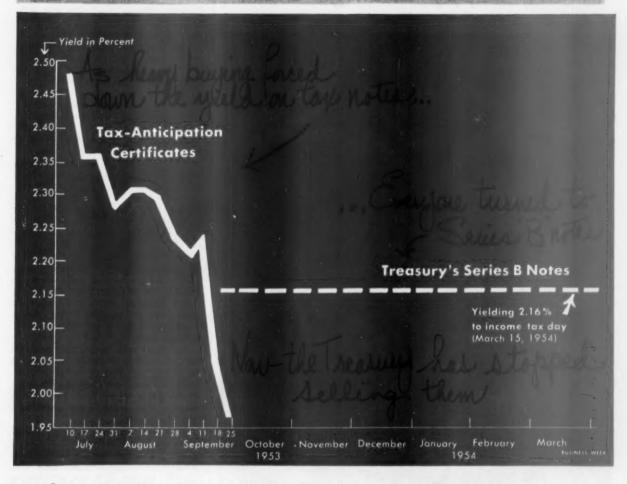
and enough reserve for safety in emergencies.

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#### FINANCE



#### Why U.S. Cut the Interest Rate

Financing the federal deficit in the last half of 1953 has turned out to be less of a problem than most people expected.

The government has picked up an unexpected volume of prepayments on taxes—through the sale of securities to buyers who are forehanded about taxes due next Mar. 15 and June 15. To make things easier for Treasury Secretary George M. Humphrey, this demand for issues that can be used for tax anticipation has enabled him to cut interest rates.

That's a quick explanation of the Treasury's weekend announcement that it was (1) stopping the sale of Scries B notes, and (2) replacing them with another series paying less interest.

 Premonition—Corporation finance officers who have been following the market probably found a hint of what was to come in these events:

· Demand for tax anticipation cer-

tificates began to swell some weeks ago. As buyers bid the price up, the yield was driven down from 2.35%-2.45% early in July to a low last week of 1.96% (chart, above).

• Declining yields for the certificates sent buyers scurrying into the Series B notes. These may be turned in against tax bills, yielding 2.16% if they are surrendered next Mar. 15; the yield is higher if they are held longer.

The Treasury had accepted bids for about \$4-billion worth of the Series B notes before the cutoff on sales. That will take care of Humphrey's out-of-pocket cash needs for some time. So the Treasury decided to shave its market a little finer—to make buyers of securities for tax anticipation accept a slightly lower interest.

 Pay-as-you-go—The whole thing may sound a bit mystifying if you haven't been following the market.

You must remember that the Treas-

ury long has extended the pay-as-you-go privilege to big taxpayers through the medium of tax anticipation issues. Currently, these are:

• U.S. Treasury Certificates of Indebtedness—Tax Anticipation Series. There are a little over \$5.9-billion of these outstanding. They bear 2½% interest, and may be tendered in payment of income taxes due Mar. 15, 1954 with interest accrued on Mar. 22. They were issued by the Treasury on July 15 to meet expenses for the second half of the calendar year.

• The Treasury Series B Savings Notes, sale of which ended last week. The Treasury has been issuing these since last May 15. The holder could use these notes in payment of taxes, collect a yield of 2.16% if he held them six months, and receive a return rising to 2.47% if held the full two years to maturity.

• The new Treasury notes, to

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replace the Bs, and bearing a lower rate of interest than the Bs.

There is nothing unusual about the Treasury offering more than one series of securities for the short-term investment of tax anticipation funds.

Last year there were two tax anticipation issues, one for funds awaiting the Mar. 15 payment day, and the other for June 15 payments.

This year there may not be a second strictly tax anticipation issue, to be payable June 15, 1954. Humphrey may rely on the new Treasury savings notes announced this week to fill the role of a tax anticipation security.

• Mills Act—The big demand for anticipation issues is largely an outgrowth of the Mills Act, which speeds up tax payments so that by 1955 corporations will be paying the entire tax bill for the previous year in the first half of the next. Even now, payments in each of the first two quarters are 40% of the whole bill. This means that provident corporations will be squirreling away money in the second half, when tax bills are low or nonexistent, against the heavy demands of the following first half. The anticipation issues offer a comfortable haven for these advance savings.

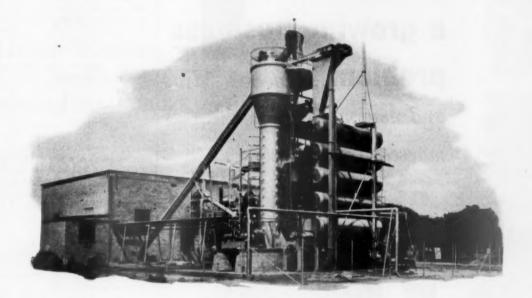
For most individuals, the yields of tax anticipation issues are too small to be of any use. But almost all corporations buy some sort of short-term security to get a return from the waiting money. The anticipation issues have proved attractive.

• Yields-A look at the dollars-andcents return will tell why.

Suppose a company has \$500,000 on hand for a tax payment due next Mar. 15. By buying 2½% tax anticipation certificates, the corporation earns a net interest of \$4,000 of a 1.96% yield basis between now and Mar. 15. The return on Treasury Savings Notes, Series B, purchased just before the cutoff last week, is \$5,400 for the period to next Mar. 15.

The short-term return due is more impressive for the big corporation with, say, taxes of \$100-million next Mar. 15. On tax anticipation certificates, the net return between now and then would be \$980,000 on a 1.96% yield basis, and \$1,080,000 if the funds were in Series B notes purchased last week.

U. S. issues acceptable in payments of taxes, incidentally, may be shown as a deduction from Federal income tax liability on the books of a corporation, thus improving the ratio of current liabilities. For instance, suppose a corporation has \$1-million in income payments coming due. And suppose it is holding the \$1-million in securities such as 90-day Treasury bills (ones not designed for tax anticipation). Suppose further that exclusive of tax times, it has \$2-million of current assets and



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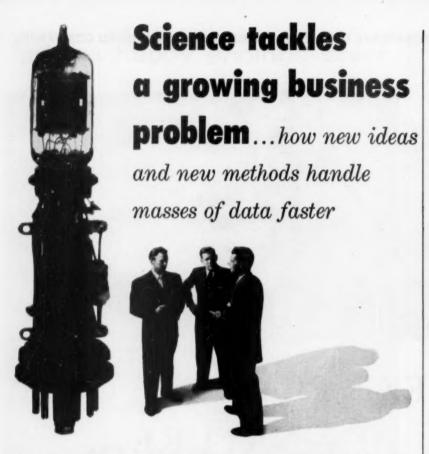
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Science and engineering faced the problem first: great masses of data had to be collected and changed from one form to another. New methods of electronic communication and various electronic and mechanical devices have helped solve that data problem. But new ideas are really responsible — the devices were merely the end product.

Today, more than ever before, Business faces the data-handling problem. Business Week turned its editorial spotlight on this problem in its December 6, 1952 issue, showing how Monsanto processes masses of data. Significantly, Monsanto (one of the leaders in solving this problem) is still striving for faster and more efficient means of processing data.

Big department stores are an example. They have invoicing problems. Banks process thousands of checks and other items daily. Insurance companies spend millions of man-hours every month handling data. Virtually every type of business encounters the record-handling problem.

Telecomputing Corporation originally faced this problem in fields of science and engineering when it began specializing in data-processing. It applied New Ideas to speed data-handling. It designed and manufactured New Instruments. It developed New Methods of electronic communication now in operation.

Today Telecomputing is applying New Ideas and New Methods, first developed in scientific fields, to data-processing problems of Business.

#### TELECOMPUTING CORPORATION

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\$1-million of current liabilities. In its financial statements, it must carry the \$1-million in Treasury bills on the asset side and \$1-million in federal income tax liability on the liabilities side, making its current assets \$3-million and its current liabilities, \$2-million, or a ratio of 14 to 1.

Now, suppose that the corporation, instead of investing its \$1-million of tax money in Treasury bills, has invested that eash in tax anticipation certificates or Treasury Savings Notes, either of the B or the new series. In this case, it would not have to carry certificates or notes on the current assets side, nor the \$1-million of tax liability on the current liabilities side. In effect, it has already paid the taxes, and the items wash each other out. The result: current assets of \$2-million and current liabilities of \$1-million, or a ratio of 2 to 1.

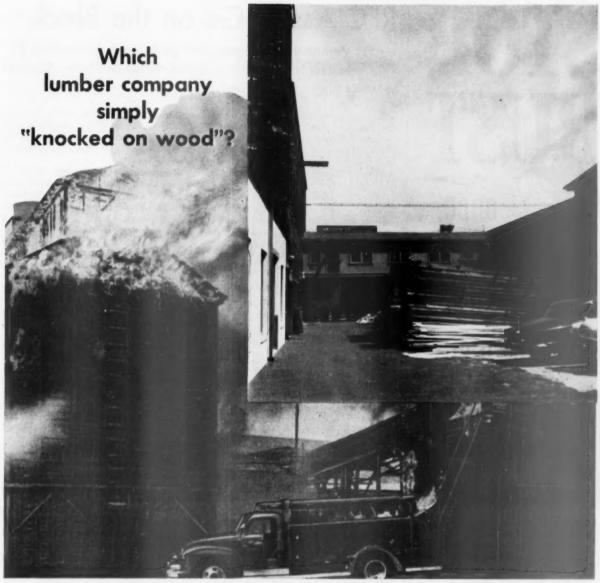
• Market Up—Prices of U.S. government securities rose sharply early this week on news that the Treasury was bringing out a new savings note issue with a lower interest rate than the discontinued Series Bs. This rise led many to believe that lower interest rates are to be the rule in the days ahead.

Corporation officers who bought 2½% tax anticipation certificates last May and June before heavy demand began pushing yields down, or who took aboard the Series B notes before sales stopped last Friday, may have roped in the highest interest return to be seen on such short-term securities for some time to come.



#### To Head Bankers

Everett D. Reese, president of the Park National Bank, of Newark, Ohio, was elected president of the American Bankers Assn. for 1953-54 at the group's 79th annual convention, which was held in Washington last week.



A fire of undetermined origin, feeding on thousands of board feet of lumber, meant a loss estimated by this West Coast lumber company at \$135,000.

Yet a continent away, in New England, not one but several fires have broken out in lumber storage sheds of the L. Vaughn Company, and damage has been negligible. Why?

The answer is simple. The Vaughn lumber company wasn't content to "knock on wood", trusting to luck. They installed a Grinnell Automatic Sprinkler System to prevent the spread of conflagration, should fires start. Grinnell Sprinklers stop fire at its source, wherever and whenever it strikes, night or day, with automatic certainty. 75 years experience proves this.

Consider the cost of fire. Not just property loss, but your records, your skilled workers. Could any indemnity check replace these? The time to act on Grinnell Protection is now... before fire burns you out, or cripples your business. Remember, two out of every five burned-out businesses never come back.

If you have fire insurance, you're probably paying for Grinnell Protection anyway, in higher insurance rates. Why not have it? Write for new Grinnell Automatic Spray Sprinkler booklet. Grinnell Company, Inc., 265 West Exchange Street, Providence, Rhode Island.







#### RFC Assets Go on the Block

Remnants of agency staff go to work persuading private investors to take over a billion-dollar portfolio. Big job: to prove loans weren't risky.

After doing a \$10-billion business in the past 20 years, the Reconstruction Finance Corp. this week slammed its doors to borrowers. As of Monday, it went out of the lending business—by orders of Congress and the new Administration.

However, RFC's stripped-down and sparsely settled offices are humming with a new activity: liquidation of a \$1.1-billion portfolio of assets. Over the next nine months, RFC must try to unload, with no fire-sale hoop-la, the following assets:

	Millions
Business loans	\$705.5
Rail & bank securities	131.3
Residential mortgages	68.5
Government agency bonds	66.5
Disaster loans	18.1
Republic of Philippines	51.0
Miscellaneous	56.1

• Big Selling Job—This is a challenge to RFC's salesmanship—not only in volume but even more in offsetting the general impression that the agency has dealt chiefly in risky loans.

Kenton R. Cravens, former St. Louis and Cleveland banker who has been RFC administrator since May, is bearing down hard on a new survey of all loans over \$500,000. He hopes to prove that quite a few of them now deserve to be upgraded by the financial community.

Cravens bit off the biggest chunks himself—the seven largest loans in RFC's books. He'll personally handle these.

The next biggest block—109 loans ranging from \$500,000 to \$10-million—he assigned to a force of 20 field examiners. These men have been out for six weeks, finding out all they can about the borrowers, their products, their competition, their position in the industry, their sales programs, and—of course—their recent all-round credit performance.

• No Distress Sale—The result: Cravens is convinced that he has plenty of high-grade investments to offer private finance.

• To investors, this means Cravens will not come begging them on a "make me an offer" basis. For one thing, the law doesn't require him to. Whatever loans he has left in his portfolio next June 30, he'll simply turn over to the Treasury Dept.

 To RFC borrowers—there are some 5,500 of them—it means a chance to place their loans in friendly hands if they can. Borrowers who have read about the liquidation of RFC are already besieging their senators with questions on how this fact will affect the standing of their loans.

• Refinancing—Here's what RFC is telling them: If your credit record with RFC is good, go to your local bank with the whole story of why you borrowed from RFC and see if you can't refinance.

In a case of this kind that RFC handled this week, an original loan of \$225,000 had been worked down by regular quarterly payments to \$110,000. RFC officials believe this risk is one that any bank would be happy to take on—and that there are lots of others like it on their books.

There will be no peddling of loan paper on a discount basis. Cravens puts it this way: If a man owes RFC \$100,000, the paper will not be offered at even \$99,999. That's what he means by no bargains.

• Sales Talk—When the American Bankers Assn. met in Washington last week, Cravens was one of the busiest men in town. He buttonholed every likely lender he could find. He lured as many as he could to RFC offices, where he showed a series of charts designed to play up the profit possibilities for bankers.

On his own particular list—the giants among RFC loans—he has two steel companies: Detroit Steel Corp., with a loan of \$43,850,000, and Lone Star Steel Co., with \$85,440,000. He has two copper producers: San Manuel Copper Corp., \$94,000,000; White Pines Copper Corp., \$37,185,000. All these companies borrowed for expansion under the post-Korea mobilization build-up.

Reynolds Metals Co. has a \$22,142,-000 loan on the book for aluminum expansion. Carthage Hydrocol, Inc., borrowed \$17,750,000 in a deal that Guy Gabrielson, former chairman of the GOP National Committee, helped engineer. Kaiser-Frazer has two loans totaling \$33,384,000

totaling \$33,384,000.
• Smaller Loans—So far, Cravens and his staff have concentrated on the over-3500,000 category. He hasn't made up his mind how to handle the 5,300-odd loans below that figure. They range down to a few thousand dollars for motels, chicken hatcheries, and lobster fishing gear.

There's some talk in the agency about reviving the idea of regional or state



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Our guess is that you'd like dependable service before, during, and after installation of your handling equipment. That's why Rapistan has more than fifty sales-service agencies across the country. From the original survey of your needs, through installation and maintenance, you'll have the dependable supervision of factory-trained specialists. They'll tell you about lease plans, service contracts, and the many other Rap-istan "extras". But, best of all you'll find them on the spot with the service you want - when you want it.

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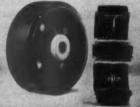
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credit pools to take over the servicing of these loans, but it's still in the talking stage.

• Regions—There's not a lot of money involved in any one state. New York, for example, has 116 of these below-\$500,000 loans, totaling \$6.2-million. Illinois has 113 loans, totaling \$6.8-million. Texas has 419, coming to \$9-million. For the United States as a whole, the smaller loans total \$155-million.

A lot of them may wind up in the hands of the new Small Business Administration, which will continue to make loans below \$150,000.

• Categories—In RFC's portfolio of \$1.1-billion, business loans of all sizes total \$705.5-million. They're all up for scrutiny by private finance except a fraction (\$58.5-million) that are delinquent. Officials know there's no point in talking about these.

Compared with business loans, some of RFC's assets will be relatively simple to dispose of. For example, RFC will open bids Nov. 17 on \$9-miflion worth of municipal and other government agency bonds. There's \$55.5-million more of these to be offered as they reach the marketable stage.

Stocks and bonds in 15 railroads, representing loans of \$86.1-million, will be disposed of by negotiation with investors. Bonds and preferred stock in 53 banks, totaling \$45.2-million, will be handled the same way.

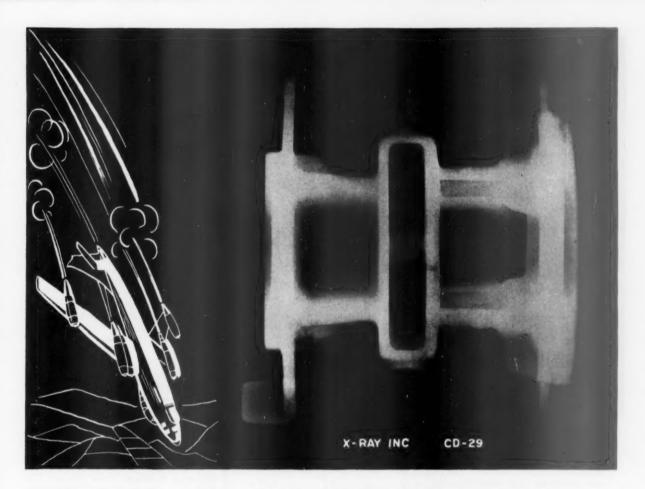
• Not on Market—Some assets will be turned over to Secretary George M. Humphrey without making any effort at disposal. A Republic of Philippines loan of \$51-million is in that category. Payments are up to date; the loan will be retained as a deal between governments.

Cravens will make no effort, either, to transfer some 3,400 disaster loans to private hands. These will probably wind up in the hands of the Small Business Administration, which is taking over this particular kind of lending function from RFC.

These loans come to \$18.1-million on RFC's books. They're made for uses as small as damage to an automobile where a natural disaster is involved. They offer no inducement to private lenders.

• Odds and Ends—An odds-and-ends collection of about \$2-million worth of physical property, taken in past fore-closures, will be sold off gradually. The stock will be worked down to the bottom of the barrel by the shut-off date of June 30.

There's been no decision yet on what to do with the \$68.5-million tied up in residential mortgages. Some are held outright; some are guaranteed. All came from government agencies such as Veterans Administration and Federal National Mortgage Assn.



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This innocent-looking casting is a potential death dealing monster. It's a vital unit for one of America's giant Atomic Bombers. Every single one of these particular parts is x-rayed by us to make absolutely certain that there are no structural defects hidden beneath its surface. For if, while in flight, this part should fail, it could destroy a \$10,000,000 plane, its crew and mission. The role we play in eliminating this possibility not only saves lives and planes but

it also ends the costly process of machining scrap parts—which is a problem you may have—and one that we can certainly help you with. Write us today for full details on how our method of quality control involving radiography, spectrography, chemistry and metallography can help you cut manufacturing costs. We are also equipped to do radium and cobalt field testing of pressure vessels anywhere desired.

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#### **FINANCE BRIEFS**

A \$150-million issue of New Jersey Tumpike Authority revenue bonds—the largest tax-exempt issue of 1953—is expected to be placed on the market about mid-month. Proceeds will be used for refunding and to finance construction. Last month there were two \$125-million offerings—the New York State Thruway Authority revenue issue and the New Jersey Highway Authority's Garden State Parkway bonds. Both were highly successful.

Pennsylvania RR, under the reorganization plan for the Long Island RR that it has offered the Interstate Commerce Commission, would carry out a six-year \$30-million rehabilitation program for the road. The Pennsy program would provide for the purchase of 112 new passenger cars costing about \$12-million. The Pennsylvania is the principal creditor and stockholder of the Long Island.

Stockholders of National Cash Register Co., at a special meeting next month, will be asked to approve an increase in the common shares from a shade over 2-million to 3-million. If the increase is approved, directors will vote a 10% stock dividend, payable before the end of the year.

Mortgage holdings of the nation's 528 mutual savings banks rose \$108-million in August to a total of \$12.2-billion, says Richard A. Booth, president of the National Assn. of Mutual Savings Banks. The August rise boosted mortgages to 45.7% of total assets, the highest percentage since 1935.

With production of pulp and paper setting records, Champion Paper & Fibre Co. expects both sales and carnings for the six months ended Sept. 30 to be "somewhat above" a year ago, says R. B. Robertson, Jr., president. Net income for the quarter ended June 30 equaled \$1.09 a common share, compared with \$1.03 in the like 1952 quarter.

Nevada Natural Gas Pipe Line Co. is planning to sell 25,000 shares of \$21 par value preferred stock and 75,000 shares of common. It will be a three-part offering: 25,000 shares of preferred and 25,000 common shares will be sold in units of one share each at \$28; another 25,000 common shares will be offered stockholders of record Sept. 21 at \$6.25 a share; the remaining 25,000 common shares are to be offered to the public at \$7 a share. Proceeds will be used to finance a southern Nevada gas pipeline system.



## you can't give it away - we can help you sell it

The nuisance by-product of power generation is fly-ash - tons and tons of fine, dusty, hard-to-handle ash that represent a major headache from any viewpoint.

Allowed to go up the stack, ash creates troublesome problems in public relations. Removed from stack gases by collectors, ash also presents a costly problem in equipment investment, in handling, and in disposal. Fly-ash doesn't make good fill, has few uses. No one wants it, and most plants must pay to have it taken away.

In one simple step, the ash problem is licked - completely - by the B&W Cyclone Furnace. Most of the ash from the coal is melted down - right in the furnace - to a slag that has many uses, is easy to handle, and often can be sold. Thus, most of the ash never reaches the stack. What little passes out will satisfy many local regulations. If collectors must be used, they can be simple and inexpensive. And the ash they collect can be easily returned to the Cyclone to be melted to slag. Thus, the fly-ash handling problem is eliminated, and the great economy of one-point slag accumulation and disposal is obtained.

The Cyclone Furnace offers many other advantages higher combustion efficiency, greater fuel flexibility, increased safety, and easier operation.

All this is accomplished - and is being proved in daily service — with less equipment, less building volume, less labor, and less maintenance than is possible with any other method of firing coal.

These are some of the dollars-and-cents benefits being enjoyed by owners of the many Cyclone-Furnace-fired boilers in operation — under a great variety of conditions - in different parts of the country. Based on this intensive, long-range experience, we will be pleased to discuss with you the many advantages the Cyclone Furnace offers.





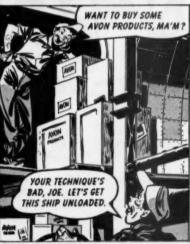
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#### COMPANIES

#### Crucial Round . . .

... looms in clash of Industrial Brownhoist groups over attempt to merge with Pennsylvania Coal & Coke.

The next round in the battle of the Industrial Brownhoist Corp.—possibly the final round as far as concerns the efforts of L. D. Silberstein as president of Pennsylvania Coal & Coke Corp. to merge the two companies—will be staged in Cleveland on Oct. 9.

The special meeting of Brownhoist stockholders on that date was not called to vote on the merger—and Silberstein says the proposed merger has been postponed for the time being. But it's definitely not abandoned, he says. So the meeting will line up the strength of the warring groups.

Minority Brownhoist stockholders led by Alexander C. Brown, a director and largest individual stockholder, are expected to turn up with well over the 33½% of the 458,000 outstanding shares that would be needed to block the merger with Pennsylvania Coal & Coke. Brown is supported by Brownhoist's president, Hoyt E. Hayes, and Bay City (Mich.) banker and Brownhoist director Charles A. Coryell. Brownsays they have enough profits to represent over 40% of the stock. Silberstein and his associates, in-

Silberstein and his associates, including David L. Subin, Seymour M. Heilbron, Oscar L. Chapman (formerly Truman's Secretary of the Interior), and Ernest Stroheim, own through Pennsylvania Coal & Coke more than 50% of Brownhoist's stock. PC&C acquired 223,991 shares in July from Alleghany Corp. for \$2.9-million, after agreeing to pay Chesapeake Industries, Inc., a commission of \$111,995.50.

• Finance—The story of that purchase is a bit involved. To finance it, Alleghany Corp. was paid \$480,775 in cash for 38,462 Brownhoist shares, with \$19,231 in cash going to Chesapeake Industries as part of its commission. To cover these payments, Silberstein and associates sold to Subin for \$500,000 a collateral trust note in the face amount of \$565,000, maturing July, 1954. The 38,462 shares were then deposited with Manufacturers Trust Co. as collateral for the note to Subin.

For the balance of the stock Alleghany Corp. accepted three promissory notes maturing over the next three years. Chesapeake Industries is getting the balance of its commission in the same manner.

Silberstein says his reason for buying

Why not use the space up here? Between the ceiling of your plant and a point seven feet above the floor there's a lot of valuable space. You heat it in winter, illuminate it, pay rent for it . . . but do you use it? Many companies lift, move and store materials more efficiently and at lower cost with Whiting overhead Trambeam. The aisles of your plant will be free of slow-moving, dangerous traffic; one man will move or stack heavier loads faster than three or four do now. Look into Whiting Trambeam Monorail and Crane Systems today ... write for complete information. WHITING CORPORATION 15661 Lathrop Avenue, Harvey, Illinois Sales Offices and Distributors in all Principal Cities WHITING PRODUCTS HELP INDUSTRY TO PRODUCE MORE FASTER! TRAMBEAM OVERHEAD HANDLING SYSTEMS

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Let your own printer show you the new Hammermill Bond. He'll be glad to help you design prestige-winning letterheads and efficient printed forms to take greatest advantage of its striking new qualities. Write today for a sample of the new, 3-ways-better Hammermill Bond to Hammermill Paper Company, 1455 East Lake Road, Erie 6, Pa.

## HAMMERMILL

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Brownhoist control was because it was a good, conservative company that could be modernized into something better. The method of buying through use of credit at a minimum of cost and without putting up cash he describes as only alert, good business practice.

• Fight-At any rate, no sooner had Pennsylvania Coal & Coke acquired control than hostilities flared between the new majority stockholders of Brownhoist and the old minority.

Brown, Hayes, and Coryell say they were assured that any merger of the two companies was a matter for future study and that present Brownhoist policies and management would remain, and as a result arrangements were made to seat a fourth Silbersteinselected director. This gave the new majority control of the seven-man board, with Silberstein as chairman.

But at the same meeting, July 17, at which the board majority was secured, the proposal was made for immediate merger of Brownhoist and Pennsylvania, for transfer of \$750,000 of Brownhoist current cash to New York banks, and for creation of new jobs for the four new directors and two other men. Later the board fixed the salaries for these positions at a total of \$109,000 a year.

· Riposte-Brown, Hayes, and Coryoll protested this action bitterly. But they boiled even more over a proposal to use \$350,000 of Brownhoist money for acquisition by Pennsylvania Coal & Coke of the Colonial Navigation Co. Brown sought and obtained a temporary injunction against this proposed loan, despite Silberstein's contention that it would have put Brownhoist in a position to own 44% of a vessel that would pay for itself in five years. The Brown group retorted that it would still be PC&C's vessel.

Then the battle for proxies beganand the Silberstein group backtracked. At a board meeting in New York on Sept. 18, the new board majority rescinded \$97,000 of the \$109,000 salaries they had voted-withdrew the \$350,000 loan proposal-canceled previously announced plans for a stockholders meeting on Sept. 23 to vote on the merger.

· Counterthrust-But still the Silberstein group attacked on another flank. Silberstein announced the special shareholders meeting on Oct. 9 to vote on a change in the company's code of regulations. This would increase the board from seven to nine members and give it power to remove any officer, with or without cause, and to fill any vacancy in any office for an unexpired term occurring for whatever reason.

Silberstein calls the present Brownhoist code of regulations "horse and buggy" and says it's only modern practice to revise it so management can



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else is as hard, strong and lastingly attractive—as impervious to corrosion, heat and wear. Used in equipment, Allegheny Metal can save on your costs . . . used in a product, it can add vital sales qualities. Now's the time to plan with it and for it, and all our facilities are at your command. Allegheny Ludlum Steel Corporation, Oliver Building, Pittsburgh 22, Pa.

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be changed at any time to bring it into accord with the board.

On the matter of salaries, Silberstein claims they were set up in relation to the merger, and Brownhoist would have been burdened with them for only a couple of months. In turn he criticized Brownhoist's present bonus system, saying it is paying out \$200,000 this year, including a bonus of about \$70,000 for president Hayes in addition to a salary of \$45,000.

· Battle Lines-As matters now stand. the Silberstein group, owning 51% of Brownhoist stock, can expect to put over its new regulations on Oct. 9. But because Ohio law says at least twothirds of a company's outstanding stock must approve a merger, there seems little chance in that direction.

Clevelanders are wondering about two things, if the merger is out of the picture: (1) Will the Silberstein group still be interested in Brownhoist (Silberstein denies he has been approached by anyone on sale of his interest), and (2) where will the money come from to pay off the notes to Alleghany Corp., and Chesapeake Industries? The word around New York is that negotiations are under way for another group to take over the Silberstein interests.

#### Disgruntled.

... executives of Hughes Aircraft were guitting one by one. Last week the Air Force took a hand.

Last week, Secretary of the Air Force Harold E. Talbott boarded a plane with two of his top aides and hustled out to Culver City, Calif. His mission: to forestall trouble at Hughes Aircraft Co., practically the only source of advanced radar fire control systems used by Air Force planes.

Hughes Aircraft's top executives, sorely irritated by the policies of owner Howard Hughes, were quitting one after another. First to go had been two scientists: vice-president Dean E. Woolridge and Simon Ramo (BW-Sep.26'53,p126). Next, early last week, went vice-president and general manager Gen. Harold L. George and vicepresident and assistant manager Charles R Thornton

By the time Talbott and his men arrived, it seemed possible that there would be a mass exodus.

Talbott managed to head that off. He's said to have talked at least four of the remaining top managers into staying 60 to 90 days-into helping the Air Force resolve the problem, salvage morale, hold the organization



**New Construction** 

Building a new warehouse is one way to cut handling costs but it is not always the wisest. Like so many companies, Morris Paper Co., Pittsburgh, Pa., faced the serious problems of inadequate storage space and too-slow handling in its multi-building, multi-level wholesale warehouse. It looked like an expenditure of at least \$35,000 would have to be added to their modernization program. Consultation with engineers, however, brought forth a better solution.

Lewis-Shepard Fork Trucks were the answer. After consideration of many types of handling equipment, Lewis-Shepard SpaceMaster Electrics were chosen because of their clean, noiseless, dependable electric power . . . their compact design and greater

maneuverability. Extra storage space was suddenly made available not only as a result of the high stacking L-S trucks but also from their ability to right angle stack in less space than any other fork truck of the same capacity. As a result, aisles were narrowed, storage area gained, and multi-levels were no longer

Here's how you can find out more about these problem-solving L-S Trucks. Send today for Proof Folders that give details of savings in many different industries. Also ask for Electric Truck Comparison Charts that help you to make your own unbiased comparison before you buy. Write direct, or call your L-S representative listed under "Trucks, Industrial" in your Yellow Phone Book!

Listed are some current L-S reorders from

blue-chip companies in various industries. Motor Car 45 L-S in use - reordered 2 Grocery Chain 73 L-S in use - roordered 6 Chemical 14 L-S in use - reordered S Elec. Goods 194 L-S in use - reordered 14 Carbon Mfr. 23 L-S in use — reordered 4 Chemicals Mfg 74 L-S in use - reordered 6 Glass Mfr. 12 L-S in use - reordered 2 Rubber Goods 5 L-S in use - reordered 3



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## Man with stapler beats man with glue 10 to 1

... and cuts costs 70%? This actual race took place in a rubber products plant. The man at left sealed cartons with glue. His companion used a Bostitch Autoclench Stapler, and averaged 10 times more cartons per hour. The manager happily reports time-and-material savings of 70%.

His shipping men are happy too. Gone are the gluepots, dripping brushes, spattered aprons. No more "glue-cake" on floor or hand truck. No "weighting" of sticky carton flaps. Cartons go off faster, cleaner, and can be re-used. And because the men are paid on piecework, takehome pay is bigger.

The Autoclench is just one of 800 kinds of Bostitch staplers that trim time and costs on thousands of different fastening jobs in factory and office. To help you fit the right stapler to the right job, Bostitch has 325 Economy Men working out of 123 cities in the U. S. and Canada—by far the largest and best trained group of its kind.

Check over your own fastening methods with your nearest Economy Man. There's no obligation. He'll be glad to tell you honestly whether stapling can save you time and money.

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together. Whether these props are strong enough remains to be seen.

· Cracks in the Walls-The trouble at Hughes started, according to department executives, when Howard Hughes came back to run the company after a long period of letting its salaried managers run it. From the time Hughes Aircraft entered the electronics field in 1948, Hughes himself had been occupied with another of his propertiesthe RKO motion picture studios. While he was busy in Hollywood, a talented group of scientists and businessmen pushed Hughes Aircraft into the top levels of its field (BW-May 23'53,p85). Both Hughes and Hughes Tool Co.-its parent company-left it strictly on its own.

Then Howard Hughes began to reassert his authority over the electronics company. At first his efforts were resisted. But since he is the owner and has no board of directors, there wasn't much anybody could do about it. Policy disputes sprang up.

The final straw for some of the Hughes Aircraft executives came six weeks ago, when Noah Dietrich, executive vice-president of Hughes Tool Co., moved his office to the Culver City plant.

This let Hughes Aircraft men know, formally, that they weren't running the company any more. With authority divided between Dietrich and Gen. George, the atmosphere became charged with tension.

• Morale—Complicating the problem all along had been the uncertainty over where the company was going. Howard Hughes—belief in the company ran—had been trying to sell it for some time. Rumors named several prospective buyers: Westinghouse, Convair, Lockheed. Hughes Aircraft executives felt they were being kept too much in the dark about these plans, and about any negotiations that might be carried on. In an effort to settle the matter, a group of the company's management men even formed a syndicate to purchase their outfit themselves—though without success.

The uncertainty that surrounded this possible sale was enough, by itself, to make Hughes Aircraft men nervous. Some of the departing executives mentioned yet another worry: they would have stayed with the company, they said, if it had been sold to a "responsible" party; but they feared another "RKO deal."

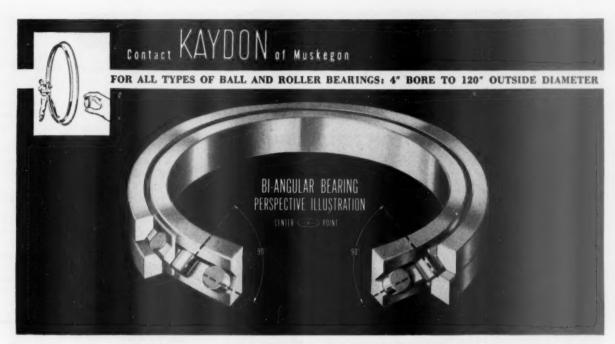
They were referring to Howard Hughes' sale of his RKO stock to a syndicate of Chicago and Texas businessmen. The deal involved a sort of installment plan: The syndicate put up a low down payment, was supposed to meet the rest of the price in quarterly payments. It defaulted, however, and finally turned control of RKO back to

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KAYDON BI-ANGULAR Roller Bearings are adaptable to various proportions of thrust and radial loads

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Whatever your bearing needs, KAYOON has all the facilities your engineers require. Whether it's only a few or many special bearings — 4" to 120" outside diameter — or millions of high-precision rollers — contact KAYOON for confidential counsel and cooperation.



31.000" x 34.988" x 2.000" KAYBON BI-ANGULAR Roller Bearings have been produced in large quantities and are successfully in use. They are further proof of RAYBON ability to design and make unusually large precision bearings for specific needs.



Close-up shows alternate rollers roversed. KAYDON BI-ANGULAR Roller Bearings are particularly suitable for low-speed applications involving heavy impact loads.

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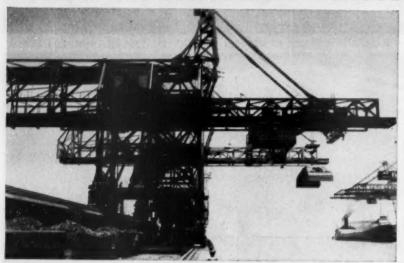
KAYDON Types of Standard and Special Bearings: Spherical Roller • Taper Roller • Ball Radial • Ball Thrust • Roller Radial • Roller Thrust • Bi-Angular Bearings

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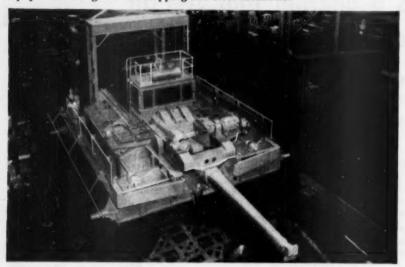
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Shipping Strongarm. These two Wellman 12 gross ton traveling ore unloaders makes fast work of moving iron ore from water to rail. Its buckets scoop 215 cubic feet at a time out of freighter and carry the load to a hopper over rail cars. This is typical of the speedy, dependable performance of Wellman handling equipment throughout the shipping and steel industries.



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"WILLIAMS" CLAMSHELL BUCKETS
MECHANICAL GAS PRODUCERS
"ANKER-HOLTH"AIR AND HYDRAULIC CYLINDERS

Hughes amidst an avalanche of unfavorable publicity.

• What's to Come?—The issue at Hughes Aircraft now is whether remaining key executives will stay on. If they do, the company's morale can probably be nursed back to health. Departing executives, far from bitter, say the company is loaded with knowhow in all the departments. All the know-how needs is encouragement.

On the other hand, if Hughes Aircraft's management all across the board should walk out, the situation would be entirely

Hughes himself is optimistic. Says he: "Out of my company of 17,000 men and women, only four have left. According to my best information, which I believe to be more accurate than any other available, no one else intends to leave at this time. There has been no effect on the output of defense material from the company, and there will be no effect."

#### COMPANIES BRIEFS

Victor Adding Machine Co. of Chicago is adding McCaskey Register Co. of Alliance, Ohio, to its holdings through an exchange of stock. Purchase price is around \$5-million cash and stock.

Ladies' Day for rail passengers is a new variant of the family-fare plan. Chicago & Eastern Illinois RR is trying out a special offer each Tuesday from now through Nov. 24: On Tuesdays a woman can buy a round-trip ticket from downstate Illinois and Indiana to Chicago for the price of the usual one-way fare. The idea is to capitalize on travel by shoppers.

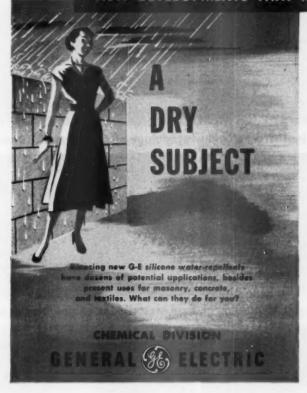
Delta-C&S Air Lines last week opened its first nonstop service between Chicago and New Orleans (3½ hr. by Constellation) and its first direct air coach service between Dallas and Detroit (by Convair 340). The Dallas-Detroit air coaches make three stops; the service augments Convair coach flights already offered by American Airline.

Alaska Steamship Co. has extended its operating season through November, on the promise of the Military Sea Transportation Service to provide 1,200 passengers, Seattle to Seward and Kodiak. The steamer Alaska sailed from Seward on Sept. 24 with the first lot of MSTS military personnel and dependents.

Texas Industries, Inc., producer of lightweight aggregates and other building materials, declared an extra dividend of 5¢ a share. In the quarter ended Aug. 31, earnings were up 20%.

#### CHEMICAL PROGRESS

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#### MANAGEMENT







Ford Motor Co.'s pitch: Workers actually profit by the developing technology of the automatic factory







Intricate, highly automated machines are turning out thousands of Ford six-cylinder engine blocks each







. . . and many of the formerly repetitious or heavy jobs have given way to this plant's version of







... become highly skilled maintenance men or job-setters with better pay, better and more important

## Selling Tomorrow's Automation

The pictures above represent what is probably management's first attempt to sell the idea of the automatic factory to the rank-and-file. They are excerpts from a movie just released by Ford Motor Co.'s Office of Public Relations. This 24-min. three-reeler was filmed by Ford's Motion Picture Section.

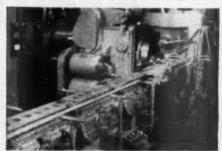
• Coming Thing-Automation-as the purists define it-is far from being just

around the corner, of course, but it has already developed far enough to start the management of some big corporations wondering about its implications (BW-Aug.15'53,p158).





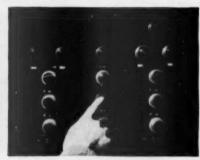
as shown here in the company's Cleveland engine plant.





day with a lot less manpower than has ever been used before . . .





automation. But what happens is that once ordinary workers . . .





jobs. This is the point Ford's picture makes in an attempt at . . .

#### to the Rank-and-file

Practically every week there are announcements about it:

 Last week, the Navy lifted the curtain on its Operation Tinkertoy, which conceivably can change production methods of the whole electronics industry.

• This week, Remington Rand, Inc., is announcing a new electronic device—the Distributon—that lets an



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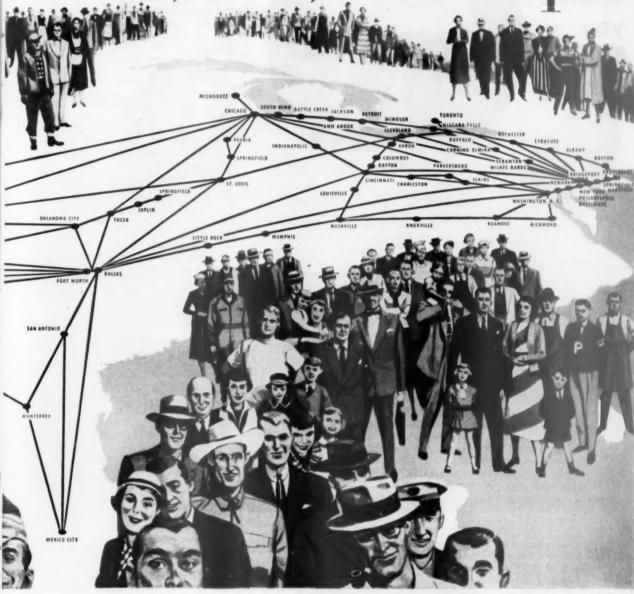


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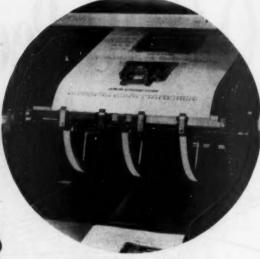
\*Sales Management Survey of Buying Power-May '53



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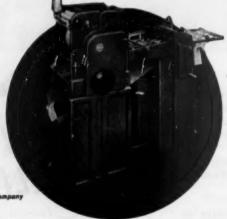
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operator check an entire inventory of thousands of items in a fraction of a second (page 118).

Both developments have this in common: much more production with many fewer workers—on the production line and in the office.

• Human Element—So far, most of the emphasis on automation has been on the production side—how much easier it will be to manufacture goods, how intricate the "brain" machines are, how to plan new plants to house the automatic equipment.

That's to be expected. With employment at record highs, management has had small need to worry about a basic problem that could be a boomerang in any sort of recession. This problem must be handled with care if it's not to block a new technological revolution. It's a simple question:

What happens to all the workers the automatic factory replaces?

• Ford's Answer-In a way, Ford's film can be viewed as an attempt to allay the fears of the rank-and-file about the advent of automation. The theme of Technique for Tomorrow is workeroriented. It tries to answer what automation means to the man on the line.

The picture has been shown only in Cleveland, but will be distributed around the country later.

The film was shot in Ford's Cleveland foundry and engine plant. These two factories lying side by side are just about as close as the auto industry has ever come to the automatic factory—although they are far from the ultimate that the technicians see ahead.

There's enough automation built into these plants to raise the age-old bugaboo of technological unemployment—and of how management can convince workers that machines help them as much as the company.

• Expanding—The engine plant and the adjacent foundry turn out 4,600 six-cylinder Ford engines daily. At peak employment, they have about 8,000 workers. Another engine plant is being built adjoining the foundry. It's scheduled to be in production late next year. It will have a capacity of 2,200 V-8 Mercury engines and will employ about 3,000 workers. When it is completed, Ford will have three plants in its suburban Brook Park location.

A fourth Ford installation has been announced—a stamping plant in suburban Walton Hills to employ 2,400.

The new plant for V-8 engines and the stamping plant, rumor has it, will be even more automatic than the present foundry and engine plant. That's logical, since Ford engineers are learning more on the subject every day.

with this array of plants—plus an ultramodern forging works at nearby Canton—the only unit lacking in the Cleveland area is a car assembly plant. All

### for Greater Strength with Lighter Weight

in modern material handling equipment The increasing use of the Evans DF Loader reflects the progress of railroads toward more efficient material handling methods.

In the DF Loader there is high strength with minimum weight through the use of N-A-X HIGH-TENSILE steel. This lowalloy steel has 50% greater strength than mild carbon steel, with greater resistance to corrosion with either painted or unpainted surfaces.

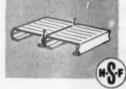
You can get the same results as Evans. Your product can



THE EVANS OF LOADER is a product of Evans Products Co., Plymouth, Mich. DF means Damage - Free, Dunnage - Free.

NAILABLE STEEL FLOORING for boxcars, flatcars and gon-dolas is made of N-A-X HIGH-TENSILE steel, and is a prod-uct of Steel Floor Division, Great Lakes Steel Corporation.





Engineering data on these products available upon request to the manufacturers.

The "Wonder Bar," a section of which is shown at left, is a vital part of the Evans DF Loader. It is a wooden bar reinforced by a Z-bar made of N-A-X HIGH-TENSILE.

The "Wonder Bar," when locked into place, secures all kinds of lading. It is strong enough to resist shifting load stresses in moving boxcars, yet so light that one man can lift it into position. The DF Loader provides real operating economies for both railroads and shippers.

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of the plants so far built or planned will be much ahead of anything Ford has in Detroit, so an assembly works embodying automation will be a natural addition.

· Good Guinea Pig-All this makes Cleveland the ideal place for Ford to produce a film that tries to put automation across to the workers.

At one point, the narrator says:

"This is an example of a new science -created in the 20th century. It's called automation-and it means letting the machines do all the heavy work and saving men for better jobs. It's a big change.'

Ford presents a fairly convincing story about how most jobs needed under automation are highly skilled-with little of the repetitious production work that Charlie Chaplin parodied in

"Modern Times

· Focus on Workers-The picture shows that it will take electronic specialists, skilled mechanics, job-setters, electricians, machinists to keep the automatic factory working. Machines of intricate design-a broacher, for instance, with 1,344 tools that one jobsetter operates to turn out 152 engine blocks an hour-take up a good part of the film. But the main focus is on the workers

In the film, the workers are shown less as production men, more as maintenance specialists. Ford won't say how its Cleveland payroll breaks down as to type of work, but it claims that 20% of all personnel, including office workers, are maintenance people. That figure far exceeds industry's average.

· Better Life-Using this tack, the picture makes the point that workers can look forward to better pay, better jobs, more responsibilities, and a need for much more highly trained workers than ever before.

Ford's picture does nod to the fact that its Cleveland setup still has workers "doing the same thing over and over day after day." But it says these jobs represent a challenge-"to design a new machine, create better jobs for men.

· Clean Slate-With Cleveland as a setting, though, Ford didn't have to tackle one facet of the problem of selling automation. In a new factory-and Ford's Cleveland operations were all started from scratch-no one is being tossed out of a job, since no jobs ex-

isted before.

• Future-But management may soon have to face up to that problem, too. An article in the Reporter, a New York fortnightly, points it up. Called "The Monstrous Machine and the Worried Workers," the article points to a mill in Gary, Ind., and says: "Their [the workers'] increasing undercurrent of foreboding is based on simple arithmetic. Some time, probably sooner than



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we think, the increase in productivity per man will rapidly outdistance the total increase in production. Then this irresistible new technology will . . . manufacture six-hour days for job-hungry men."

## When Line and Staff Tangle

Even the Army, which invented the concept, is having trouble. In business, there's an increasing desire to avoid what one man calls the triumph of technique over purpose.

"The bright young officers shy away from command. 'Get on the staff. You can make decisions without responsibilite.'"

That's what the semiofficial Combat Forces Journal has contributed to the current dispute over line and staff functions. The Journal's tart comments were drawn by the criticism of Army morale launched by Gen. Matthew B. Ridgway, the new Chief of Staff. But its article cut right to the heart of the line-staff dispute, bewailing the existence of too many "staff studies and too much talk; not enough decisive action."

The Journal wants staff functions chopped back to size: "Put the crown back on the troop commander and pat him on the back once in a while. Cut the staffs back, reduce the pipeline and form enough units to command."

• Business Side—That sounds like a drastic solution of the controversy, even in the Army, which practically invented the line-staff relationship. But it's attracting plenty of interest in business, which has been borrowing the line-staff concept ever since corporations began growing huge and complex.

The business version of line-staff means specialists at headquarters on an advisory staff and operating men in the field and plants constituting the line. Even before the Army broke into the open, some top men in business began wondering whether there wasn't a basic conflict inherent in the whole concept.

Some of their discontent is summed up in a new book, Communication in Management (The University of Chicago Press, \$3.75). The author, Charles E. Redfield, a New York University lecturer with experience in business and government, says many people have strayed from their function of helping line people to make and sell nuts and bolts. They are developing vested interests in their own pet projects, and management is beset by "the triumph of technique over purpose."

• At the Top—Some companies have attempted solution. Thus Electric Storage Battery Co. has put its plant manager in full charge of all plant personnel—line, staff, and auxiliary. That last is a category ESB invented to describe specialties like accounting.

On the academic side, Dean Edward

P. Brooks of the Graduate School of Industrial Management, Massachusetts Institute of Technology, wants to take a shot at the problem, using part of last year's \$1-million research gift from the Alfred P. Sloan Foundation (BW-Apr. 19'52,p126). A former Sears, Roebuck executive, Brooks thinks the problem needs looking into.

• Delving—Research is still skimpy on the subject. One of the few major projects was reported in 1950 in the American Sociological Review by Melville Dalton, University of California sociologist. Dalton studied line-staff relations in three plants, ranging in size from 4,000 workers and 200 management people, to 20,000 workers and 1,000 management. Among factors that harassed relations, he stressed these:

 Differences in age, education, and social background. Staff people as a group were younger and had more education. Seasoned line men found it hard to take advice from what they considered to be young upstarts.

• The need for staff to justify its existence in the eyes of line. Operating men doubted the need for outside advice, and considered staff as an attempt by top management to check on them. This feeling came to a boil when staff men went over the heads of intermediate line men, to get management decisions.

 The fear of line that a staff increasing in personnel and cost would diminish its own authority. The fear sharpened when staff came up with new techniques, which embarrassed line and added to the importance of staff.

• The control, by a line executive at the top, over promotions in the purely staff hierarchy. Dalton found this led to politics, to deals between staff and line. And it put pressure on staff to make line look good in order to get line cooperation, and hence a chance at promotion.

Dalton also found that staff men were more ambitious to get ahead than line, simply because they got less pay and authority. This ambition was often foiled by the fact that there were fewer rungs in the staff ladders than in the line's. In two of the plants studied, there were only three to five levels of staff authority, compared with five to 10 in line. Unable to move up, the staff



## How many anchors for Columbus?



The Nina, the Pinta and the Santa Maria

each carried seven cast iron anchors. Larger ships of the time carried as many as fifteen! For anchor cables deteriorated at sea, and anchors were regularly lost.

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of alloy steel, most ships carry just two anchors and a rarely needed spare. Similarly, today's locomotives and airplanes, machine tools and engines, power plants and home appliances all contain safer, stronger metals—made with alloying elements produced by Vanadium Corporation of America. In ever-increasing quantity, Vanadium Corporation's far-flung mines and mills are producing metals such as chromium, titanium, silicon and vanadium...helping America's basic industries produce better steel, iron, aluminum and magnesium...helping better metals build a stronger New World.



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man could boost his prestige only by increasing the number of men under him. Dalton blames this empire building for the disproportionate size of staff in some companies. He also thinks it accounts for the staff man's tendency to overreach himself, and get in the hair of line.

• Fear of Reprisals—Dalton deplores the sparseness of research on the whole subject, and blames part of it on the fact that workers won't talk for fear of reprisals. One case he cites involved a plant with 6,000 workers, where supervisory and staff people were asked to fill out a questionnaire on trouble spots of their relations with superiors. The aim was to establish an "open door" policy in the plant, once the complaints had been pinpointed.

The trouble was that every questionnaire that came back was unsigned and typewritten. Reply after reply stressed that identification would surely lead to reprisals sooner or later. All hands regarded the "open door" as a myth, and said the questionnaire meant going over a superior's head.

Dalton doesn't feel that he has dug deep enough to say how many people are getting fed up with the line-staff concept. But he has talked to a good many people who indicated a trend to simple line organization.

In recent talks with the staff people interviewed in 1950, Dalton found that most of them felt their work was not appreciated. Line people, for their part, expressed dissatisfaction with staff setups. One superintendent had an interesting suggestion: College-trained men should be made line foremen, but paid according to their knowledge and education—say \$12,000 or \$15,000 a year. He thinks they would be more valuable there than warming a chair and advising line people.

• Coordination—Dalton thinks it's much too early to consider scrapping the whole line-staff idea. But he has some suggestions on ironing out the kinks. One is to set up a separate coerdination board of both line and staff. The group would referee fights.

At present, Dalton says, there is too much emphasis on protecting the hierarchy. Too many contributions from the lower echelons are twisted or side-tracked for fear they will show up some-body. The board could act as a non-partisan arbiter to avoid this grief.

Here are some other suggestions:

• Create more promotion opportunities for staff, thus reducing the pressure for hogging authority and building up personnel.

 Give staff executives higher pay, but hold them responsible to a greater degree for seeing that their projects work in practice.

 Require that staff men have some line experience.



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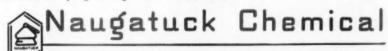
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### Paper Work . . .

... claims as many U.S. workers as agriculture. Much of it, a management expert says, is unnecessary.

Paper work has become a fetish of modern business management, and it is costing business too much. That's the conclusion you can draw from a report released this week by Emmett J. Leahy, head of Leahy & Co., New York management consultant company.

In a preview of the report, Leahy told a Washington meeting of the Society for the Advancement of Management how strong the fetish has grown:

 Business is adding about 15% a year to the existing hoard of business records, which Leahy estimates at oneand-one-quarter trillion pieces of paper.

• Paper work now claims as many workers as agriculture, counts one office worker for each two factory workers. The ratio 30 years ago was one office worker to four factory workers.

 More than half of all employees in banks and insurance companies shuffle papers, rather than procure new business.

 In the textile industry, more than a quarter of all employees are office workers.

Leahy contends that a lot of this muddle can be cleared away if management will put as much effort into the problem of office streamlining as it has into speeding up factory operations.

• Too Many Copies—He told the society that business should start by controlling the creation of new paper work. It can do this largely by cutting down multicopies of new correspondence and forms.

Second, it should eliminate overlapping filing operations and duplications. From his work as a records consultant, Leahy reckons that about 40% of the records management keeps is useless and can be destroyed. Another 30% can be stored away in business archives centers, leaving 30% in the office.

Leahy's background has put him in close touch with the problem of what records to keep, what to toss out, and how to put dampers on new accumulations. As a consultant, he has put his ideas to work for companies like Monsanto Chemical Co., Eastern Air Lines, Worthington Corp., du Pont, Bethlehem Steel, Ford of Canada, Title Guarantee & Trust Co., Aluminum Co. of America. In 1948, he headed the paper work study by the Hoover Commission. During World War II he worked for the U.S. Navy as director of the Records Administration and







director of the Office Methods division.

• What It Costs—What does paper work cost? Leahy makes two points:

 Clerical salaries are now equivalent to one-ninth of the nation's payroll.

• It costs about 20¢ to create one letter or other document, a penny a year to keep it in the office.

#### MANAGEMENT BRIEFS

William A. Patterson, president of United Air Lines, Inc., has been named chairman of the Committee for Economic Development's business-education committee. That's the group that brings colleges and businessmen together to set up centers for economic education and research. So far, 25 programs have been launched like that at the University of Rochester (BW—Jun.20'53,p79). Centers are being organized at the universities of Alabama, California, Tulane, Washington (St. Louis), Syracuse, Pennsylvania, Pittsburgh, and Washington (Scattle).

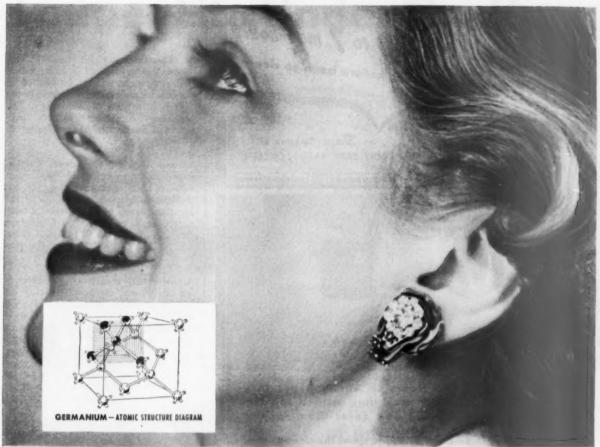
Economic education for top management will be started this year at New York University where evening seminars will feature top-flight speakers, including Louis J. Paradiso, chief economist of the Office of Business Economics in Washington, Daniel H. Brill and Woodlief Thomas of the Federal Reserve Board staff, and Arthur I. Bloomfield of the Federal Reserve Bank of New York. Others will be college and business experts.

Inplant schooling is offered by Vanity Fair Mills, Inc., at Monroeville, Ala. The mill provides space and equipment for typing and shorthand classes; a state teachers' college is furnishing instructors. Mill workers who want to attend classes spend 11 hours a day at the mill—three hours in class on their own time, eight hours working at regular pay.

Ralph S. Damon, president of Trans World Airlines, was voted Management Man of the Year by the National Assn. of Foremen. He got the award for "his work in behalf of management unity in American industry."

Stock purchase plans are gaining. The New York Stock Exchange says 40 companies listed new shares in 1952 to be applied to stock purchase plans covering executives and workers. This compares with six companies in 1950.

Starting salaries for college graduates are up to 10% over last year. That's the consensus at the Midwest College Placement Assn. Conference in Milwaukee. Graduates with bachelor of



Atomic Structure diagram courtesy Bell System Technical Journal

## When it is hard to spot the hard-of-hearing...

Eagle-Picher Germanium has helped to make the modern hearing aid more efficient, and surprisingly lighter in weight. Old-fashioned hearing devices, with large cumbersome batteries which told the world of the wearer's affliction, have been outmoded.

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science degrees start this year at \$325-\$350 a month, those with arts degrees at \$300-325.

A national center for research into methods of buying and replacing industrial equipment will be established in the business and economics department of Illinois Institute of Technology. The Machinery & Allied Products Institute will finance the center during its first years.

Eastern Railroads Presidents Conference, an organization of 36 castern railroad chief executives, has set out to improve community relations in the 14 states served by their roads. A committee has been formed in Columbus, Ohio, headed by a New York Central RR superintendent, to give the program a trial run.

A midcentury conference on resources for the future, originally planned for last March (BW-Nov.15'53,p34), will be held in Washington Dec. 2 to 4 by Resources for the Future, Inc., a nonprofit corporation. Working under a grant from the Ford Foundation, the conference will recommend policies and programs for public or private efforts to help preserve the nation's resources for the future.



#### **Button-pushers**

Three men can control several plants from the Hicksville (L. I.) headquarters of the Long Island Lighting Co. Output of gas and electricity in the company's scattered plants can be regulated (by one person if necessary) from the bomb-resistant underground room.

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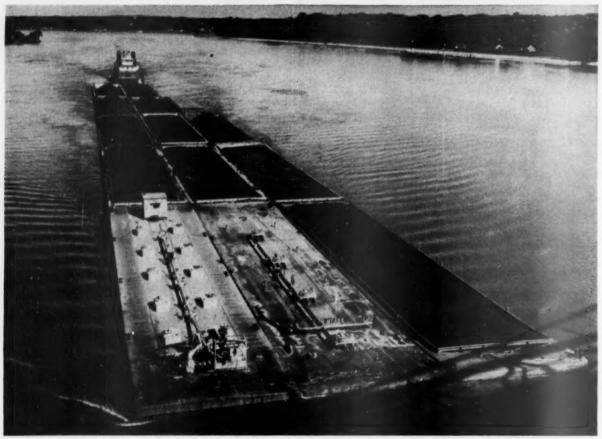
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EFFICIENT TOWS, like this 11-barge, 19,150-ton batch of coal, gasoline, and steel on the Mississippi, are helping the . . .

## Freight Boom on the Inland Waterways

Almost without anyone noticing it, the inland waterway transportation industry has worked its way into the middle of a healthy boom.

It was a long time ago that barge traffic was run almost out of existence by the ferocious competition of the then young and lusty railroads. Since then people have tended to forget about the waterways. Few noticed the faint revival of barges in World War I. Not many more realize that since the late 1930s, traffic on the canals and rivers has experienced an almost uninterrupted climb.

• Percentages—The percentages tell the story. In 1939, the waterways—which do not include the Great Lakes—accounted for 3.7% of all the ton miles of U.S. transportation. In 1950, with over-all ton mileage almost doubled, the waterways' share had climbed to 5.1%. The ton mileages—less significant but more dramatic—show that the waterways had 20-billion in 1939, 51.6-

billion in 1950, and a leap to 63.2-billion in 1951.

The climb is still continuing, judging by more recent figures just issued by the Army Corps of Engineers for the Mississippi system. On the Mississippi River alone, from Minneapolis to the Mouth of Passes, La., the Engineers recorded 77.6-million tons—not ton miles—in 1952, excluding car ferries. That was a jump of some 5.1-million tons over the previous year. Inland waterway statistics are very slow aborning, but samplings for 1953 indicate that it should show a similar rise.

The bright prospects for barging come as no surprise to the industry, however startled the public may be. You could see that last summer when Federal Waterways Corp.—a hardboiled pro in the trade—was delighted to buy the Federal Barge Lines from the government, though the company has been in the red for most of its existence (BW-Aug.15'53,p166).

• The Causes—Two major factors, which interact with each other, account for the flourishing traffic: (1) the industrial expansion of the land along the waterways, and (2) the tremendous improvement in barges, towboats, channels, locks, and shoreside freight facilities.

The waterways have always provided the cheapest way of transporting bulk cargo: petroleum products, grain, sand and gravel, coal and iron, chemicals. Modern industry consumes these bulk goods in vast quantities; if a new plant is to be built, there's a definite argument for locating it on a suitable waterway. As a rough rule of thumb, you might say that the ideal site would have a waterway to bring in raw materials, and a railroad to take away the finished products.

When a waterway has a reliable deep channel and locks, and when these are plied by modern and efficient tows, the inclination to locate a plant at the waterside gets a big boost. It works both ways. If the shores of a river are dotted with plants, there's all the more reason to improve the routes and equipment that could serve their needs. In fact, it's something of a hen-and-egg problem trying to say which factor came first in the waterway traffic boom.

Be it hen or be it egg, there's a byproduct advantage to channel improvements. Usually, they're accompanied by flood control measures, and the increased security along the shores helps spur industrial and agricultural expansion, and the growth of towns

sion, and the growth of towns.

• Riverside Plants—The American Waterways Operators, Inc., a trade organization, has issued second-quarter, 1953, figures that give some notion of the industrial expansion along the rivers and canals. AWO says that in this period plans were announced for 77 major waterside projects, not counting hundreds of lesser ones, to a total value of over \$750-million. On the Mississippi alone, 14 new plants will cost upward of \$125-million.

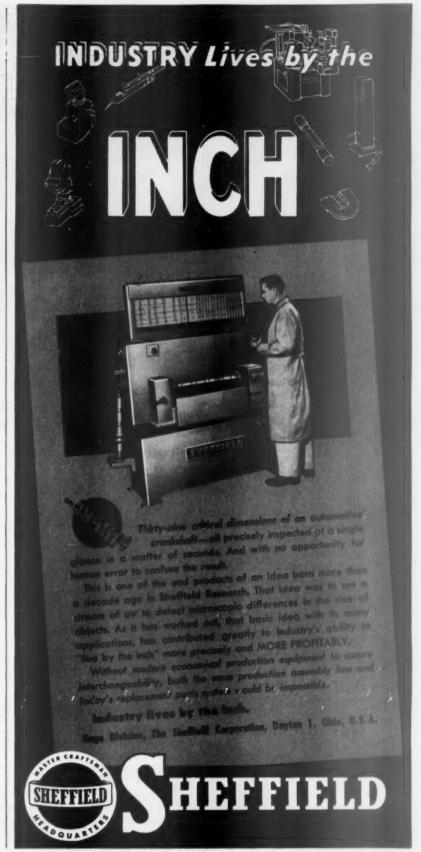
Prime examples on the Mississippi and its tributaries include: a \$30-million chemical plant organized jointly by Mathicson Chemical Corp. and Mississippi River Fuel Corp. at St. Louis; a \$5-million auto body plant by A. O. Smith Corp. at Granite City, Ill.; a \$66-million coke and iron mill by North American Steel Co. at Clinton, Iowa; an \$85-million steel mill expansion at Weirton, W. Va.; a \$40-million Ford assembly plant at Louisville; a \$70-million Wheland Co. plant at Chattanooga.

Electric utilities are also showing an increased tendency to build along the waterways, to take advantage of low freight rates on the huge amounts of coal they consume.

• Efficiency—The improvement of service breaks down into two fields: the waterways and terminals, and the actual barges and towboats.

The Corps of Engineers works constantly to maintain channels and to open up or deepen new ones. Biggest news this year is the \$40-million Chain of Rocks canal and locks on the upper Mississippi. This massive undertaking, which offers a seven-mile still-water passage through the so-called St. Louis reach, eliminated the last dangerous stretch in the upper river. Before its completion, long tows had to be broken in half to negotiate the stretch. As a byproduct, a \$1.5-million harbor is already being built.

The Engineers claim that every dollar spent on such improvements is returned at least twofold in revenues and tonnage. One example: When the Ohio





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#### "...chemicals are expanding with especial briskness as new types of barges are developed . . "

BARGE BOOM starts on p. 84

River project was started it was estimated that it would take 9-million tons a year to justify the cost. Last year, the traffic was 55-million tons.

Currently, the Engineers are working on a 9-ft. Missouri River channel from Sioux City to the junction with the Mississippi—a job now 65% complete. The Engineers say it will raise traffic on the Missouri from a meager 44,000 tons a year to 4-million tons.

• Terminals—Creation of better terminal facilities, especially by the river cities, is playing a big part. At Memphis, a million dollar river-rail-truck terminal has been opened. St. Louis is talking about a new terminal to double present capacity.

Barges and towboats, the rolling stock of the rivers, are being improved drastically to meet modern demands. Special purpose barges have been developed to carry chemicals, and almost anything that needs special handling. Integrated tows (BW-Jun.21'52,p120) make handling easier, reduce water resistance, and permit bigger and more efficient operations. Diesel power plants have vastly increased the power of the towboats.

Even the older equipment turns in an economical performance when it is handling traffic in volume. The single towboat steamer Tennessee (picture, page 84) is pushing upstream 11 barges of coal, one of steel, and two of gasoline for a total load of 19,150 tons. Coal tows of 20,000 tons have been operated—it would take 300 railroad cars to move the same load.

• Freight Costs—The rate advantage of the barges over railroads is, of course, variable. But it is large. Some examples on grain, one of the chief waterborne cargoes: From Havana, Ill., to New Orleans it costs \$6.27 to move a ton of grain by rail, by barge it's \$3; from Minneapolis to Memphis, the rail rate is \$17.69 per ton, the barge rate is \$55.55.

On the Mississippi, petroleum products make up by all odds the biggest part of traffic, but ores and minerals, grain, coal and coke, and chemicals are heavy customers.

Chemicals are expanding with especial briskness as new types of barges are developed. Monsanto Chemical Co. is a good example. It barges sulfur from Texas to St. Louis, salt upriver from Louisiana, and styrene from Texas to Port Plastics, near Cincinnati, just to mention the biggest loads.



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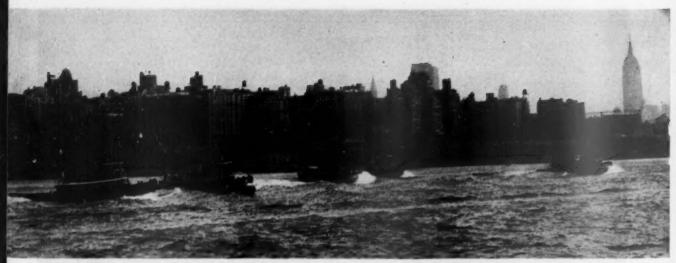
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TUGBOAT RACE, an annual New York publicity event, was won by Socony 11 (far right) this year. But day in, day out . . .

## Tugs Scramble for Shrinking Business

Campaign to clean up the waterfront may restore the port's prestige, but fresh trouble is piling up.

Once a year the tugboats of New York harbor make a formal public appearance. A few of the port's 400-odd tugs get an extra swipe of brass polish and line up for races (above) over a two-nautical-mile stretch of the Hudson River.

The rest of the year, the tugboats get little public attention. They drudge in tense competition for the port's shrinking volume of business. For men in the trade, tugboating is far from the gay sport it appears on Regatta Day.

• Strike Worry—An extra cloud hung over last month's port promotion stunts: the threat of a waterfront shutdown. As long as two weeks before the longshoremen's contract expired this week, tugboat men could see a decline in business. Shippers were diverting freight to other ports for fear of a New York tie-up.

Forecasts at longer range pointed to another storm center: the campaign to clean up the waterfront. Tougher elements of longshore labor are expected to fight the New York-New Jersey Waterfront Commission that starts Dec. 1. And AFL's expulsion of the International Longshoremen's Assn. last week (BW-Sep.26'53,p174) touched off a fight between labor groups.

At all stages of this turmoil the tugboats are smack in the middle. Any dock shutdown hurts their business. Anything that gives the port a black eye may affect their billings for years to come. The industry has never regained business it lost during a 10-day tugboat strike in 1946.

• Clean Union—Tugboat crews are represented by Local 333 of ILA. Company officials hold Local 333 blameless of waterfront racketeering.

"It's clean, and it's run democratically by the men themselves," says James McAllister, president of McAllister Bros., Inc., and chairman of the Marine Towing & Transportation Employers Assn.

"Clean as a hound's tooth-even if it does belong to ILA," agrees Lloyd H. Dalzell, president of Dalzell Towing

"We think the union has been unfair in its demands—it tries to impose more severe conditions on us than on our competitors," says Rear Adm. Edmond J. Moran, president of Moran Towing & Transportation Co., "but it has fought cleanly."

However, Local 333 can hardly escape the problem of other ILA locals: whether to stick with an independent longshoremen's association or join a new AFL affiliate.

In fact, its choice is a bit thornier than some. Capt. William V. Bradley, head of Local 333 and a vice-president of ILA, is being mentioned in labor circles as successor to Joseph P. Ryan as ILA president. That could split Local 333 pretty badly.

 Long-run Effect—Tugboat operators are divided on prospects for a waterfront cleanup.

"We'll have a lot of squabbling that will hurt the port," one company president says, "and it won't cure anything. Racketeering is too deeply entrenched. You can't change human nature overnight at the docks."

Another company president has high hopes for the waterfront commission. "In the end," he says, "New York's natural advantages as a port will be the deciding factor."

#### I. The Port's Dilemma

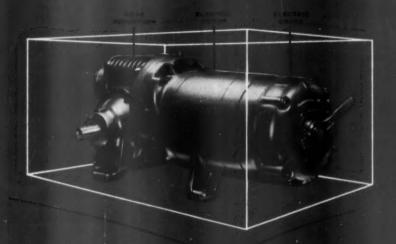
The most alarming economic fact about the Port of New York is this: The port's share of the nation's trade is falling off. As the New York Crime Commission said in a report to Gov. Dewcy, the post is "in danger of losing its position of supremacy."

Austin J. Tobin, executive director of the Port of New York Authority, cites figures on New York's share of the nation's general, cargo tonnage. From 37.1% in 1947, New York's share dropped to 31.7% in 1951. By 1951, Tobin says, the port had lost cargo valued about \$1.2-billion a year.

• Losers and Gainers—Part of New York's loss results from the shift of freight from railroads to trucks. Harbor carriers—lighters, barges, and the tugs that move them—have been losing out for 25 years to trucks that cross the port's waters by bridges, tunnels, and ferries.

Another chunk of New York's former business has gone to other ports. For example, grain cargoes and other bulk items go to Baltimore, Norfolk, and Savannah instead of New York. New Orleans is also a strong rival.

"Total U.S. commerce [page 194] is shrinking," says Jim McAllister, who is also president of the Foreign Commerce Assn. "New York's commerce is shrinking even faster. That's partly



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because the city administration, except for Cavanagh [Edward F., Jr., commissioner of marine and aviation] and a couple of others, never fully recognized the need for fostering the in-

dustry.

· Economics-"New York has always been a high-priced port to bring a ship into," McAllister adds, "but you always got a quick turnaround. Lately, port services have slowed down, and there's been a terrific increase in the cost of turnaround. Ships that used to come irregularly have gone elsewhere. The regularly scheduled runs are all that's supporting us-and we could lose those, too.'

The Port of New York has about 160 ships at piers and moorings on an average day. The port's traditional specialty is docking them fast, unloading and loading them fast, and getting them

out to sea again.

It costs a ship owner from \$3,000 to \$5,000 a day for overhead on a tiedup ship. That's why cargoes go where they get the best handling-not necessarily the cheapest.

#### II. Industry in Transit

Major tugboat lines in New York are closely held, closemouthed companies owned by families. Figures for the industry don't exist-in public, at least. It's hard enough to define the industry without measuring it. Roughly, the industry includes railroad tugs, harbor carriers, transport tugs, and tugs owned by private companies in oil, coal, stone and gravel. Railroad tugs-about 120 of them-handle 290 carfloats and 2,500 lighters and barges that lift rail freight over water. Fifty to 100 transport tugs dock and undock ships.

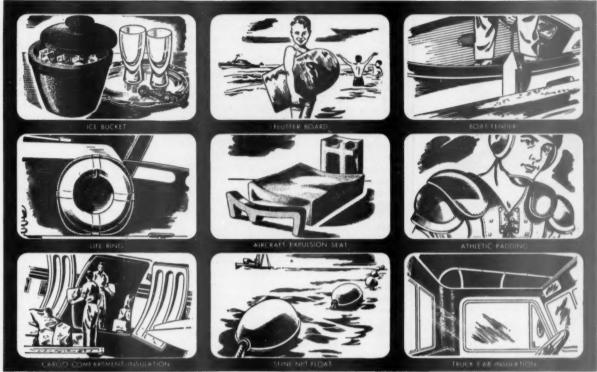
· Size of the Business-Adm. Moran, head of Moran Towing & Transportation, figures there are about 425 tugs of all types active in the harbor, performing about \$80-million worth of

services each year.

"There's less business in the port than right after the war," he says, "though Moran's business has held up well. Our volume hasn't dropped. But you can't have 1,500 or so ships laid up in reserve fleets without making the port feel it. The quality business is here now, but not quantity."

· Company Volume-When you get down to individual companies, it's even tougher to get a hint of figures. Published guesses of Moran dollar volume ran to \$8-million in 1948 and about \$10-million in 1951. Current volume may be around \$12-million.

An oft-cited rule of thumb is that Moran does three or four times the volume of its nearest competitor. But rivals like Jim McAllister and Lloyd Dalzell smile when that ratio is mentioned. A complicating factor comes



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NAME (Attach coupon to your letterhead or business card and mail today!) up: It's almost impossible to compare two companies directly.

For example, McAllister Bros. owns a lot of lighters, does a big salvage business, and moves Gulf Oil barges over inland waterways. Moran is in ocean towing and inland waterways, but not in lightering. Both are in transport tug work, but the makeup of their remaining business is quite different.

In the same way, McAllister is hard to compare with Dalzell and Meseck Towing Lines, Inc., the other big transport tug operators. That's because McAllister also operates a division in Norfolk and a subsidiary, P. F. Martin, in Philadelphia; Dalzell and Meseck are preoccupied with New York.

Transport tug operators are usually ranked in this order: Moran, McAllister, Dalzell, Meseck. These four lines move 95% of the ships in the port.

• Competition—The transport tug business shows what is happening generally through the industry. The port went into World War II with a dozen companies operating transport tugs, came out with nine, and now has four. The others fell by the wayside as operating costs rose. Most were absorbed by the survivors. Meanwhile, business was falling off so that the buyer rarely needed to add the tug fleet to his holdings—all he needed was the weaker line's customers.

"Costs went up faster than rates," Jim McAllister explains, "so the smaller and less efficient operators were forced out. That's bad for the port as a whole. There are a lot of creeks and backwaters that used to be served by small companies that have no towing service now."

• Pulling and Hauling—Competition is nowhere near so rough and bloody as it was 50 or 75 years ago, but it's no less tense. Towing lines bring all sorts of pressure on shippers and ship lines to use their tugs instead of someone else's. Dalzell and Meseck have shifted Navy business back and forth between them, winding up with Dalzell.

them, winding up with Dalzell.

Oil barge and tanker business has been increasing fast in the port, but the 1946 strike was costly. Dalzell lost one of its best customers when Esso decided it was cheaper to invest \$2½-million in its own tugboat fleet than to risk another tie-up.

to risk another tie-up.

Furthermore, the advent of newer and bigger tankers has meant that the tugs had fewer ships to move, even in the lucrative oil business.

• Profit Pinch—Towing rates haven't gone up anywhere nearly so fast since the war as labor costs and other overhead, tugboat executives say. The basic rate per hour was \$21 when the war ended, is \$37.50 now.

Meanwhile, hourly wages of crew and other labor have gone up; the union has won a 40-hr. week and a welfare fund and pension plan, both out of employer contributions.

• Work Schedule—A little-understood problem of the transport tugs is the unbalanced work load. The standard traditional crew of seven men is on watch from 8 a.m. to 4 p.m.; the crew gets meals and gets overtime outside these hours. Yet the bulk of docking and undocking freight ships comes before 8 a.m. and after 5 p.m.—those are the working hours of the longshoremen, the biggest cost item for a ship operator.

To cut down overtime payments, tug companies have installed three shifts or watches to a tug: two aboard and one ashore. The second crew on board takes over at the end of the other crew's standard working day.

The union fought three-crew boats when the idea was first tried, and the companies had to go to court to put the arrangement into effect.

• Diesclizing—Almost all the threecrew, around-the-clock tugs are diesels. As with the railroads, towing companies find that two diesels can do the work of three steam units. Diesels need less maintenance, give more power per dollar spent for fuel.

Trouble is, new diesel tugs cost money. In an industry that's not expanding, outlays for equipment come hard. Yet Moran has bought seven Grace-class tugs since 1949, at about \$400,000 per copy; 12 of Dalzell's 38 tugs are diesels; McAllister has converted almost all its tugs to diesel power, at its own Jersey City yard and at one-quarter to one-half the cost of new boats.

• Speed Advantage—Twenty of the 22 tugs entered in the annual races this year are diesel-powered, either direct drive or diesel-electric.

Speed isn't the first thing a tugboat man looks for in a boat, but he likes speed when it's combined with high utilization, as in a diesel unit. The bane of transport tug lines, for example, is the time lost in waiting and in getting from one job to another.

Rates for docking or undocking a ship are figured on a minimum rate per tug, which varies with location in the harbor, plus running time from the Battery. A shrewd dispatcher can keep a tug busy a long time without actually returning it to the Battery basing point. Yet Dalzell figures that one-third of its operating hours in 1952 were unproductive.

It usually costs a ship line about \$50 a tug to dock or undock a ship. A medium-sized freighter will normally need two tugs for either movement; a medium-sized passenger liner will add a third tug only for docking; the Queens and the United States need six or seven tugs to dock, two or three to sail. Even so, tug costs aren't a big factor in ship operation.

figure replacement costs by the hour—

# NOT by the pane

Most of the cost in replacing broken windows is the cost of labor—not the cost of panes. Surveys show the average installation cost of a 12" x 18" pane is \$3.00—and \$2.65 of this goes to labor and factory overhead. By preventing window breakage you can reduce maintenance costs.

Glazing with PLEXIGLAS acrylic plastic is a good way to prevent breakage. Strong and resilient, this light weight, durable, outdoor plastic withstands impact, twisting, and vibration—worst enemies of industrial glazing.

PLEXIGLAS is supplied as clear material, and in translucent or transparent colors that diffuse daylight, cut down direct sky glare, or reduce solar heat. We will be glad to send you the names of dealers in your vicinity.

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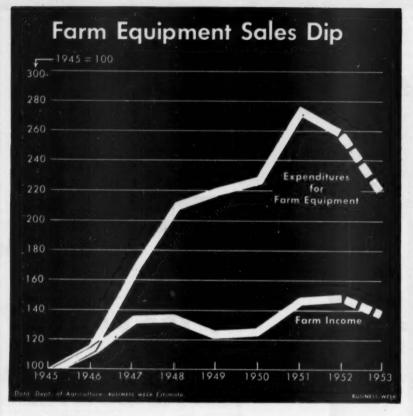


FOR INDUSTRY

ROHM & HAAS

WASHINGTON SQUARE, PHILADELPHIA S, PA.

Representatives in principal foreign countries



### But Makers See Good Market

They trace this year's sales drop to an ease-up in the farmer's urgency to buy. Now they look to improved machines to whet interest, just as auto model changes do.

Farm equipment makers are having a new experience—they're among the first major industries to start slipping in sales (chart). Usually, they're near the last to feel a recession.

In 1930, for example, farm equipment makers hung up their biggest three-month sales till then. In 1949, other industries slumped, but it took a year for farm equipment to feel anything. And then Korea came along to swing the trend upward again before any damage was done.

This time, farm equipment sales have been going downhill since June, 1952. As the chart shows, with 1945 as the base year, 1953 sales will be about 15% below 1952. But you can also see why farm equipment will still be the fourth biggest in history.

A \$1.6-billion expenditure in 1953 will be topped only by 1951 with \$2-billion, 1952 with \$1.9-billion, and 1950 with \$1.7-billion.

• How It Looks—On the bad side, a drop of even \$300-million in total expenditure for equipment means manufacturers have to slash production and

wrestle with big inventories. They aren't happy about it. But their thinking goes along these lines:

Sales have fallen off, and inventory built up painfully before production could be valved down, but . . .

• Farm incomes in 1953 will still be the third highest on record (first-half 1953 was only 5% less than first-half 1952). So farmers have money. To get them to spend it, they must be persuaded that . . .

• Farm mechanization is far from the saturation point. The U.S.' population is increasing, and pressure is on long-range improvement of yield from limited acreage. But . . .

• It will take strong selling to make the farmer see that he can't afford to do without the new machines the manufacturers have in store for him.

• The New Approach—Industry thinking isn't so simple and straightforward as that, of course. There are arguable points along the way: the farmers 32% loss in export sales in first-half 1953, the effect of acreage controls, the volume of farm debt, the number of

postwar machines that won't wear out for years to come.

In the long run, though, most manufacturers think farm income will stay at a relatively high level and the need for mechanization will get more intense. The key to their strategy appears to be what John L. McCaffrey, president of International Harvester Co., calls "planned obsolescence."

This idea is borrowed from the automobile industry: You can make a man dissatisfied with his present model by showing him something better. That way, you induce him to get rid of a machine that has lots of useful years left. Either you make him want to keep up with the Joneses or you offer him a chance to cut his costs by buying a more efficient machine.

• One Case—The experience of Ford Motor Co.'s Tractor Division shows what happens when you introduce something new. Ford brought out a new tractor in January and added a cotton harvester, forage baler, and other new tools—and Ford's first-half 1953 sales ran ahead of last year. That's against the industry trend. Moreover, when Ford began importing a bigger, heavier Fordson tractor from England last month, it was a sell-out.

• Good Chance — Most machinery makers think sales have dropped recently because they have flooded the market since the war. McCaffrey estimates that 69% of tractors now on farms are postwar models. That's true, too, of 61% of the combines, 77% of the corn pickers, 86% of automatic hay balers, 100% of the cotton pickers on the nation's farms.

However, McCaffrey points out that these postwar models were mostly designed before World War II. In the rush to fill demand after reconversion, the manufacturers had no time to make up new designs, to retool for sharply different models.

"A very large part of the equipment now on farms, while it is relatively young in years, doesn't represent the most modern design and engineering work of which this industry is capable," McCaffrey told last month's Farm Equipment Institute in Chicago.

• Saturation—If the market is continually stimulated by new machines, there needn't be any saturation point for farm equipment, makers declare.

"The country still has less than one tractor per farm," says W. A. Roberts, president of Allis-Chalmers Mfg. Co. "Most farms need two, some need three. I wouldn't agree there's any saturation point in tractors or anything else if we keep better products coming out all the time."

John T. Brown, president of J. I. Case Co., agrees the sales drop can't be laid to saturation of the market.

Brown lays the sales decline to (1)

the pinch between the farmer's income and the cost of what he has to buy and (2) turning of the corner between short supply and adequate supply.

"If you have one tractor too few, there's a shortage," he says. "If you have one too many, you have a surplus. Then the farmer can defer buying because he knows he can get a piece of equipment whenever he wants it."

• Retrenching—Manufacturers are cutting production while they wait for new models and sales campaigns to take effect. Some lay off employees wholesale. Others let the labor force shrink by not replacing men lost in normal turnover.

Case has turned loose about 4,000 employees in the last 14 months, and the foundry at Bettendorf, Iowa, has been closed. Allis-Chalmers says fewer than 1,000 employees are on furlough. Minneapolis-Moline Co. recently closed its smallest plant in Minneapolis until sales improve. International Harvester lopped off 9,000 of its 71,000 employees between May and September.

• Diversifying—Some companies are trying to spread their base by diversifying:

Oliver Corp. now owns A. B.
 Farquhar Co. (BW-Nov.3'51,p142), maker of portable conveyors, compressors, hydraulic presses, spraying and dusting equipment, food machinery.

• Decre & Co. is going into the fertilizer field (BW-Jul.19'52,p86) with a \$20-million plant now under construction at Pryor, Okla. Decre will produce anhydrous ammonia and urea for commercial fertilizers.

• Selling—Like other industries that find themselves suddenly in a buyer's market, farm machinery people have their sales problems. One company estimates that 70% of its territory managers and 50% of its dealers have never known a tough competitive market.

"We're telling our people to get off their tails and go out and see customers," says McCaffrey of Harvester. "And we're re-educating them on what each of our machines does and how it works."

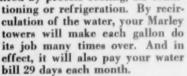
"Farm equipment isn't worth a damn if it doesn't reduce the farmer's production costs," said another company president. "We've got to make our dealers go out and show the farmer how our equipment will do just that."

Newly merged Masséy-Harris-Ferguson, Ltd. (BW-Aug.22'53,p36) offers proof of what aggressive selling can do. Last year Ferguson dragooned 1,300 of its 2,100 U.S. dealers in an intensified sales demonstration program. So far this year, 40% of those 1,300 dealers have improved on last year's sales, some by a 2 to 1 ratio. For every tractor sold by the remaining 800 Ferguson dealers, the 1,300 chosen dealers have sold slightly better than two tractors.



Shortage of water for industrial operation is enough to make any businessman join in the Rain Dance. Happily, there's a far better way to eliminate water shortage—and save money in the bargain.

The answer is a Marley cooling tower that will save more than 95% of the cooling water required by process cooling, air condi-



For information, write today or see a representative of the Marley Company, world's leading producer of water cooling equipment.

ENGINEERING SALES OFFICES

The Marley Company

Kansas City, Mo.





CROWDS filled the streets last week in suburban Oak Forest, where the Houston Home Builders' Assn. set up its "Parade of

Homes." Every house was a model; built on the same block with 30 others, it got hundreds of visitors a day.

## Department Store of Homes Draws

It looks much like any block in a newly developed residential area. The houses on it are all new, though of different styles. It's away from the hubbub of metropolitan Houston—its par-

ent city. Surrounding it are woods and fields.

It was relatively peaceful this week. Last week, however, an estimated 150,-000 people descended upon it. They milled around on the sidewalks, wandered through the homes, milled around some more in the back yards. They came in the early afternoon and stayed till 10 at night every day.



DUST is blown in parade visitors' eyes by a helicopter landing on a nearby field. Coming in from Houston, the . . .



HELICOPTER bore editors of home fashion magazines, other visiting experts on architecture and interior decorating.



HOMES at Houston's show were completely landscaped and completely furnished to make for maximum eye appeal.



FURNITURE was on display, and for sale, as much as the houses themselves. Dealers got an avalanche of orders.



KITCHENS were objects of special attention. Builders tried hard to satisfy the hard-to-please housewife.



AIR CONDITIONING was a feature in many of the homes. An attractive one, too: Parade's opening day was a scorcher.

## Crowds of Houston Shoppers

If some new lawns got trampled and some fresh-painted walls fingermarked, though, nobody minded very much. The block, and its houses, were built expressly for public exhibition. It was Houston's "Parade of Homes."

• Multiple Gain—Local home builders' associations were staging similar exhibitions last week (National Home Week) in some 25 other cities across

the country—among them Los Angeles, Scattle, Knoxville (BW—Sep.12'53,p 76). Houston's show was probably the biggest, according to the National Assn. of Home Builders, but it wasn't unique;



LONG LINE formed outside the gate on opening day. Officials guess total attendance at 150,000 during parade week.



SWIMMING POOL decorates \$23,000 prize home, which will go to parade visitor holding lucky registration ticket.



### A man on the Verge of a Profitable Discovery

This inquisitive executive is discovering that there's big money hidden in his own plant chimney!

Big money in the form of tons of valuable dust which can and should be reclaimed rather than being constantly dissipated in the air.

Trapping that valuable dust is our busi-

ness. Specialized equipment, developed by Buell Engineers, does the job with maximum efficiency.

It's a fact that dozens of America's Leading Corporations have been using Buell equipment for years. We shall be glad to supply the names of several such Companies in your own field.

Why not send for our informative brochure-The Collection and Recovery of Industrial Dusts-it explains all three Buell systems of industrial dust recovery. Write Dept. 30-J, Buell Engineering Company, 70 Pine Street, New York 5, New York.



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**DUST RECOVERY SYSTEMS** 

it was merely one example of a new home-selling technique that, NAHB estimates, probably induced well over a million U.S. home-seekers to visit model homes during the single week ended last Sunday.

How does this magnetic technique

Say there are 20 builders operating in and around a certain city. Each of them has a certain type and design of house that he wants to promote.

If he follows the old suburban tradition, he'll do his promoting on his own. He'll build a model home somewhere, place some newspaper advertisements or give the problem to an agent, and wait for prospective buyers to trickle in.

Or he can go the Parade of Homes way. The local builders' association invites him to get together with the other 19 builders. They pool some of their money and buy a plot of land-generally in a newly developed or undeveloped area near the city. They set up some kind of governing committee to coordinate their work. Then they start building-each builder putting up his own model home. The result is a "department store" of houses, as one builder puts it.

· Principles-This has some happy ad-

· The big, consolidated promotion is more powerful than the sum of its parts. The drawing power of each house is augmented by that of the other 19.

· The home-hunter, attracted to the Parade of Homes, can look at 20 houses within a day or two-without traveling more than a few hundred yards. It would take him weeks, and miles of driving or bus-riding, to see the same number of homes under any other system.

• The Works-Houston's Parade of Homes, in suburban Oak Forest, included 31 houses ranging in price from \$13,500 to \$23,000.

Every house was completely landscaped and furnished-down to books on the bookshelves, tablecloths on the tables. Here, furniture and appliance dealers got into the act as well as builders: The furnishings and decorations were as much on display-and for sale-as the houses.

To defray the cost of producing the parade (\$30,000 for advertising and promotion alone) the Houston Home Builders' Assn. charged an entrance fee to builders, dealers, everyone who exhibited in the show. The visiting public was charged 25¢ a head.

But when the show closed at the end of National Home Week, few considered their money ill-spent. Many of the parade houses had been sold, and builders had orders to put up many more in Oak Forest and other suburbs of the city.

GAIR
FOLDING
CARTON
solves



## damage-in-transit problem

## NEW PACKAGING GIVES FULL PROTECTION TO HATS

For well over a century, hatmakers packed and shipped in round or oval set-up boxes, made by hand. Though giving fair protection from external shocks, this traditional type of box couldn't keep the hats from shifting about.

Result: Damaged hats and dealer complaints.

Working with the Hat Corporation of America, Gair technicians jointly developed a 3-piece folding carton with an interior structure which anchors the hats in place — a safeguard against shifting.

Now Dobbs, Knox and Cavanaugh hats — to name just three — travel to the buyer unaffected by rough handling.

In addition, this new carton — striking in design, sparkling in color — is speedily set up by machine, eliminating slow, costly hand labor.

Gair is good at solving all sorts of packaging problems. Why not let us tackle yours? Check with your nearest Gair plant or write to our New York office.

Want a copy of our brochure on folding cartons? Write to Department 15.



Another plus for this Gair carton: 18 knocked-down cartons, ready for instant assembly, take up no more storage space than one traditional set-up box.



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## make it adaptable...provide Space Control

MILLS Movable Metal Walls enable Dun & Bradstreet, Inc. to control the space in its new Home Office Building—to keep it at maximum efficiency even when changes in needs dictate radical changes in layout.

Mills Walls are *permanent* in every desirable respect—distinctively modern and attractive, completely insulated and soundproofed. But whenever the need occurs, they can be moved quickly, easily and at very low cost—generally in a matter of hours, overnight or during a week end, without interrupting normal business routine.

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Dun & Bradstreet makes effective use of Mills glazed railings for semiprivate offices, providing efficient distribution of natural light. Mills Walls are available in a wide variety of styles and finishes.





keep office space efficient...

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Architects: Reinhard, Hofmeister & Walquist Builders: George A. Fuller Co.



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Wiring for light, phone and air conditioning controls is easily installed in base, cornice and panel connections.



There will be no dust or debris when these semi-private offices are rearranged. Whole sections of Mills Walls may be moved intact, all parts used over and over again.



Mills exclusive all-welded panel construction provides maximum structural stability, dignified, modern, architectural design.





The Mills Movable Walls Catalog is a practical 48-page workbook on Space Control. We'll gladly send you a copy upon request.

YOU'LL NEVER FIND

# a swordfish in the shallows

Above ... the day so diamond bright, so sleepy warm.

Far, far below — another world of endless, darkening azure
. frosty cool, hushed. Here lurks our Cyrano of the deep ...
watching, waiting, planning his next meal-finding venture.

When planning a new product, don't get left high and dry with old-school concepts of materials and methods. Head for open water where you're free to explore the depths of something different ... the reason-why of castings. And what better place to check on castings than at Campbell, Wyant and Cannon? Here, at one source, lie years and years of foundry experience ... the finest in foundry facilities. Based on a long background in metallurgical engineering, precision control and mechanized production — CWC gives you castings that machine easier, wear much longer and cost much less. This, plus a wonderful, new-found freedom of design for your product.

Let Campbell, Wyant and Cannon bring your product to the surface.

Remember...when it comes to castings, it's never sink
but always swim at CWC.

#### CAMPBELL, WYANT AND CANNON

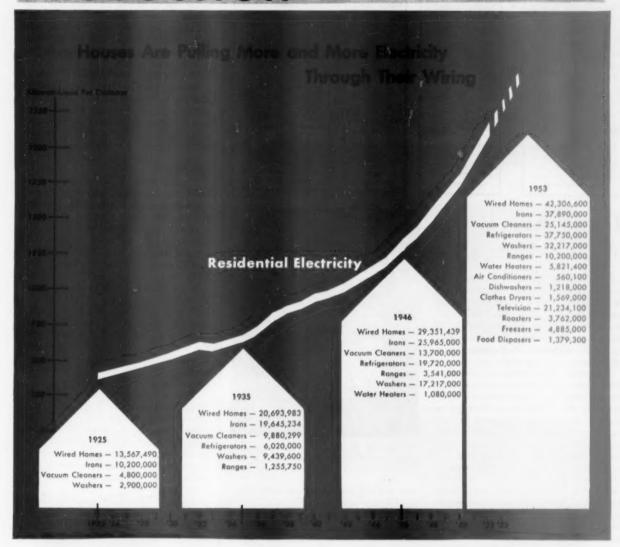
FOUNDRY COMPANY, Muskegen, Michigan

Manufacturers of Gray Iron, Alloy Iron, and Steel Castings



Since 1908

## PRODUCTION



## The Boom That Has Led to a Crisis

For 30 years electrical appliance makers have been on a spree. Almost everything they've made, the U. S. consumer has bought and put to work (chart). Vacuum cleaners and irons, washing machines and razors, infrared broilers and ultraviolet sun lamps have tumbled out of the manufacturers' shops in endless procession. At times, it seemed to men in the business that it could keep on expanding forever.

Now, suddenly, appliance makers find themselves up against a ceiling: the wiring in the consumer's home.

 Overload—Today's average house was wired, at the time of building, with relatively small requirements in mind. The wiring was designed to carry current for lighting, for small appliances such as an iron and a toaster and a radio, and for one or two bigger appliances such as a refrigerator and a washing machine. Few technicians foresaw the tremendous added load that would be piled on by an air conditioner, a television set, a dishwasher, a home freezer, and the myriad smaller appliances that have appeared on the scene each year.

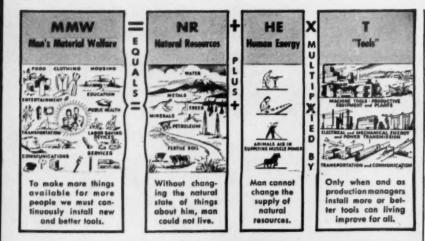
The result is that millions of homes now have inadequate wiring. In practically every home built before World War II, wiring is more than inadequate; it's obsolete.

Appliance men see this as a major crisis. It's the theme of a show spon-

sored in New York this week by the Eastern Electrical Wholesalers Assn. You can expect similar crusades and educational campaigns in the future.

• Lesson—Appliance makers and dealers aren't the only people who have a stake in promoting better wiring. The effects of inadequate wiring can reach all the way from the homeowner himself to the utility company that supplies his power.

For instance, here's a day in the life of Consumer Able. After he has left for the office, Mrs. Able puts the breakfast dishes in the electric dishwasher, empties scraps into her garbage disposal unit, checks the time on her electric clock, turns on the radio to get the



### Tools Are Born of Self Denial

For centuries, man was limited to the use of a few hand tools. No matter how skilled, men could turn out only a very limited amount. Even with hand tools, strenuous muscular effort and long work days, the average man could not supply his family with more than meager food, shelter and clothing.

Essentially this condition prevailed until about 1800 when machine tools were introduced. These new tools could tirelessly shape out two or more pieces exactly alike. From that point on man was able to fashion complicated production and power tools of all kinds. Thus, the Industrial Revolution was born and output per man-hour began to climb.

But then, and today, tools could not come into being without self denial. Every time a new tool is born someone gives up something. This self denial will not be practiced unless there is a reward in prospect.

This is as true of the thrifty rich man who forgoes the purchase of a new yacht as it is true of the thrifty poor man who forgoes the purchase of a new suit.

This self denial is essential to the greatest good because every progressive society must use tools in ever-

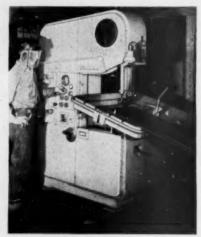
increasing quantities.

England's Socialists have bruised their heads against the fact that new tools, not new laws, make for progress. English workers are now demanding the government supply more and better tools.

The good life comes from good tools.

The better life comes from better tools.

One of the better tools to come into man's use in recent years has been the contour cutting band machine, invented and pioneered by The DoALL Company. The first "DoALL" placed on the market in 1935 was heralded as being able to



ON MANY JOBS, a worker can produce far more with a DoALL band machine than with any other tool.

saw, file and grind with specially developed band tools.

Today there are machines with variable speed ranges up to 15,000 blade feet per minute that will utilize any of 18 types of band tools available in over 300 combinations of width, pitch, set, tooth design, etc. Any internal or external shape can be cut in any material.

The thin band tools cut only a narrow slot so that the unwanted section removed from the production piece can often be saved for some other purpose. Other types of machine tools remove sections of metal by reducing them entirely to chips. This comparison makes it obvious that unusual time and material savings are possible with band machines manufactured by The DoALL Company, Des Plaines, Illinois.



WRITE FOR WALL CHART "How Living Improves"—free of charge and without advertising matter.

THE DOALL COMPANY
254 N. Laurel Ave., Des Plaines, III.

weather forecast, puts the milk in the refrigerator, puts the laundry in the automatic washer. Her well-equipped home has all of the 56 "common" appliances.

Before going upstairs to make the beds, Mrs. Able decides to have another cup of coffee. She plugs in her electric coffeemaker.

Immediately, a fuse blows.

• Whose Fault?—This minor catastrophe sets up a chain reaction. Mrs. Able may report her appliance dealer to the Better Business Bureau or write a nasty letter to the manufacturer. She may tell her friends that she wouldn't have another coffeemaker from X Electric Company as a gift.

She will probably call her power company and complain that she's getting inferior electricity. As a public relations gesture, the power company may send a service man around to change the fuse—although in most instances it's not the company's responsibility. (Last year Consolidated Edison Co. of New York, Inc. answered more than 200,000 calls on blown fuses at a cost of about \$1-million.)

If Mrs. Able lives in a rented apartment or house, she takes out her wrath on the landlord. If it's her own home, the next time she's in the supermarket she picks up some giant fuses or circuit breakers. She puts these in place of the correct ones in her control box.

This is about the most dangerous thing she could do. A fuse is a safety device, designed specifically to "blow"—thus breaking a circuit—when wires begin to overheat. An educated guess by electrical engineers puts the nation's electrical fire loss for last year at \$97-million. A major cause is tampering with fuses.

• Layout—Though Mrs. Able doesn't know it, there's nothing wrong with either her coffeemaker or her electricity supply. The trouble centers in the wiring of her home.

Say it's about 10 years old. It has four circuits running through it: two "general purpose" and two small appliance circuits. This probably seemed like enough to the builder, but it isn't.

The power comes from two heavier lines running from the utility company's main line outside in the street, through the fuse box in Mrs. Able's cellar, and thence into the four indoor branch circuits—each of which has its own fuse. No current flows through the system until Mrs. Able turns on a light or plugs in a toaster. This act closes the circuit; current starts flowing as demanded by the appliance.

The maximum safe load of a general purpose or small appliance circuit is probably around 2,000 watts. Compare that capacity with the wattage needed by even medium-sized appliances: An electric broiler needs 1,600 watts; a

# SPRA-TAINER: Does It again!

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Above are two of several fine products now pressure packed in Crown SPRA-TAINER for distribution by the REXALL DRUG COMPANY in their drug stores everywhere. Here again "First Choice" goes to the seamless construction and exclusive "Modern Design" of SPRA-TAINER—world's original and leading light-weight propulsion can. Whatever can you choose from Crown's Complete Line, you may be sure it will be the finest quality can of its kind to sell your product.

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Remington Rand

coffeemaker, 1,000; a rotisserie, 1,600. More than one of these appliances on the same branch circuit can easily blow a fuse. In Mrs. Able's home, a really powerful appliance such as a clothes dryer or an electric range (6,000 to 10,000 watts) could not be made to work at all without higher-capacity wiring.

• Air Conditioning—Engineers first began to worry about the wiring problem years ago, when television pictures started to shrink and flicker. The reason was overloaded circuits. This summer, air conditioning has been the straw that broke the camel's back all across the country.

The problem has been particularly acute in New York City, where 73.2%

of the population lives in apartments. Since air conditioners require a separate circuit in most instances, the landlord who has installed one has often upped rent as much as \$5 a month.

Many landlords have put a flat ban on air conditioners, and on many of the 10 other major appliances that require separate circuits.

• Costs—Compounding the problems brought on by the expanding array of new appliances, and increased wattage on old ones, is the drive to keep down building costs. Residential wiring has been a major casualty of the cost-trimming process.

Until television sets started to flicker and air conditioners became a problem, few people outside a small circle of electrical engineers realized that there was any difference between adequate wiring and minimum lawful wiring. If a builder satisfied the law, that satisfied the home buyer. Only when it was too late did the home buyer discover his mistake.

In effect, the builder passed on to the owner a future rewiring job at a much higher installation cost, and on less advantageous financing terms, than if an adequate wiring system had been installed in the first place.

Costs vary a good deal according to local codes and practices. But in a very general way adequate wiring—as compared with a minimum job—adds 2% to 3% to the total cost of a new house. On a theoretical \$12,000 house, conventional wiring costs \$250 to \$350. The adequate job may run \$600.

• Check List—Since so many appliances keep coming along, the industry has to keep revising its adequacy standards. If you wonder whether your own house is adequately wired, check with your electrician on these three things:

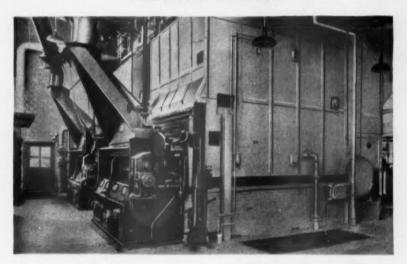
Gross load: All of your present and future use of electric service depends on the capacity of the wires bringing current into the house from the outside power supply. There should now be three wires, running into the house. The third wire accommodates some of

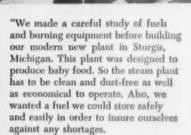


# "COAL'S BEST FOR OUR MODERN PLANT!

It's low in cost...
It's clean and convenient!"

says G. W. Peters, Engineering Manager
M&R DIETETIC LABORATORIES, INC.
makers of PREAM & SIMILAC





"We decided on bituminous coal and the up-to-date installation shown here. It certainly fills the bill on every count. Our modern combustion equipment makes coal far more economical than any other fuel. Up-to-date coal and ash handling give us convenient operation completely free of dust nuisance."

Additional case histories, showing how other types of plants have saved money by burning coal the modern way, are available upon request,

Discover for yourself the great advantages of coal burned the modern way. Call in a consulting engineer. He'll show you how today's combustion equipment can give you 10% to 40% more, power from a ton of bituminous coal than from equipment used only a few years ago. He'll show you how modern labor-saving coal and ash-handling equipment make a coal-fired installation clean, convenient, and dust-free.

If you plan to remodel or build a new plant, be sure to look into the low cost and convenience of bituminous coal. Consider coal's other advantages, too. It has reserves that are virtually inexhaustible. America's bituminous coal mining industry is the most efficient and productive in the world. With bituminous coal, you can be sure of plenty of fuel at relatively stable prices now and for years to come.

### If you operate a steam plant, you can't afford to ignore these facts!

- BITUMINOUS COAL in most places is today's lowestcost fuel, and coal reserves in America are adequate for hundreds of years to come.
- COAL production in the U.S.A. is highly mechanized and by far the most efficient in the world.
- COAL prices will therefore remain the most stable of all fuels.
- COAL is the safest fuel to store and use.
- COAL is the fuel that industry counts on more and more—for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

### BITUMINOUS COAL INSTITUTE

A Department of National Coal Association Southern Building, Washington 5, D. C.

YOU CAN COUNT ON COAL!



where corrosive vapors, heat, odors or dust seemed to be inevitable accompaniments to certain processes. Today, in thousands of plants from coast to coast there is no such problem. De Bothezat Fans and Ventilating Equipment, made by a division of American Machine and Metals, Inc., make working conditions pleasant and high production possible; protect health and equipment. If you have a ventilating problem, send for the new De Bothezat catalog.

A.M. and M. supplies the armed forces and the Nation's industry with essential equipment. Other important products are U.S. Gauges, Tolhurst Centrifugal Drying and Separating Machines, Niagara Filters, Troy Institutional and Commercial Laundry Machines, Gotham Instruments, Riehle Testing Machines, AutoBAR Dispensers, chemical manganese, zinc and silver.

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the newer appliances that need higher voltage.

Branch circuits: You need three kinds of branch circuits inside the house. General purpose circuits serve lights all over the house and convenient outlets everywhere except in the kitchen, laundry, and dining areas. You need all appliance circuits for your refrigerator (which doesn't need much power) and portable appliances.

In addition you need a separate branch circuit for each major appliance such as your deep freeze, air conditioner, electric range, and clothes dryer.

Switches and outlets: Unless an electrical system is easy to control, it can't give you the best performance. Lighting should be controlled from several switches. Plug outlets should be installed so no point along the floor line of a usable wall space (eliminating doors) is over 6 ft. from an outlet.

A booklet entitled Getting the Most from Your Home's Electric System is available from National Adequate Wiring Bureau, 155 E. 44th St., New York 17, N. Y. Price is 15¢. The bureau is a nonprofit organization jointly sponsored by a group of national societies representing the electric utility industries, contractors, and manufacturers of electric products.

• Way Out—What's got to happen in the electric appliance industries has been summed up in an editorial in Electrical Construction and Maintenance, a McGraw-Hill publication. It said in part:

"There's no easy way out of the dilemma. Stubborn tradition dictates that wiring shall fit an arbitrary cost budget even when common sense directs functional design based on probable use. The first task is to establish some acceptance of new cost levels.

"New cost levels will need full industry encouragement. The big contractors and industrial electrical engineers who have no direct interest in residential wiring still carry great influence among their social and business contacts on every thing electrical. The endorsement of modern standards of electrical utilization in the home is a social responsibility of those who have the technical understanding to speak with independent authority."

Getting adequate wiring into the million new homes going up this year appears to be pretty well under control. But the problem of rewiring practically every house and apartment more than five years old is going to take some doing. Pulling wires through old partitions can run into a sizable sum of money. With such a tremendous potential market, someone is bound to come up with a cheaper but adequate wiring technique or a modification of now standard appliances, but no one has yet.



### This is the profile of a bank

MOST OF THE TIME marble and steel disguise it. But after a visit or two to any bank you begin to see its true profile.

It may be the face of a teller, a file clerk, a loan officer or—the president. Whoever it is, this much is certain—the profile of a bank is always the face of the man or woman in the bank you know best.

Why?

Because banks are people. Tellers' cages, vaults, iron gates—all the familiar symbols of banks—are nothing more than tools used by

human hands to get the job done.

Yes—banks are people. More to the point, they are conscientious professionals who see banking as a career rather than just another way to earn a living.

To Mr. and Mrs. America this says, "Your money (along with your country's financial tradition) is in good hands."

It also means that the business of putting money to work—banking's basic function—is administered by responsible professionals with a keen sense of trade competition, and a

highly developed awareness of customer service.

These people are America's banks. Bank buildings, however simple or ornate, are only their workshops. It is their humanness that transforms facades of marble and steel into faces of friendliness and warmth.

Chase National Bank is proud of the part it is playing in American progress.

### The CHASE National Bank

OF THE CITY OF NEW YORK
(Member Federal Deposit Insurance Corporation)

### THE THRILL A MAN DESERVES



### LOCK YOUR DESK LOAD YOUR GUN

"Pull!"... you shout, then you point and lead and ... POW! Another clay pigeon is ground to dust! Take an afternoon for yourself and shoot a few fast rounds of skeet or trap. It's fun... and it will do you a world of good. To shoot your best, shoot a Winchester. The superb balance and perfect pointing qualities of Winchester shotguns are legend on skeet and trap fields.



### THE PRODUCTION PATTERN

### Transistors: High Hopes vs. Hard Facts

ver five years ago, Bell Telephone Laboratories, a subsidiary of American Telephone & Telegraph Corp., introduced the transistor, a device that's engineered for replacing electronic tubes and doing their jobs better (BW—Jul.10'48,p39). Some experts in industry have given transistors a buildup worthy of the invention of the perpetual-motion machine. And many have predicted that transistors have a cure for nearly every technical drawback of tubes. Today, transistors are growing into a little industry within an industry, made up of roughly 16 different manufacturers, half of them giants.

But the early enthusiasm of many potential users has lately turned to disappointment. In fact, transistors haven't the market that most new products usually develop five years after their introduction. So far, telephone exchanges and hearing aids are the only two fields where transistors are now nearly standard components. The military services—whose equipment can use transistors for critical strategic reasons—have bought a bunch of them, but haven't yet approved transistors for operations in the field.

HE one big complaint against transistors is that they aren't reliable. Their service life as a computer part, for example, can't be predicted as can that of an electronic tube. A computer uses several hundred vacuum tubes, many more than any other kind of equipment. A product engineer can closely estimate the number of tubes that will burn out during a certain period of operation. He can even give a new computer a shakedown test, and weed out the bad tubes. That way, the computer will stay on the job longer, and have less down time for repairs. But a computer designer can't apply the same shakedown methods to transistors. He can't determine the service life of any one batch of the units supplied at random by a manufacturer.

The lack of reliability doesn't mean that the manufacturers are turning out expensive, fly-by-night products. Providing it is carefully selected, a transistor lives up to many of the claims made for it:

Compared to a vaccum tube, it takes hardly any space, needs very little electric power, and starts operation immediately without any warm-up time. These characteristics make transistors a natural for hearing aids, which are produced with more finicky quality control than a tabletop radio set. The features also pay off in phone exchanges of AT&T, whose manufacturing subsidiary makes transistors under carefully controlled conditions.

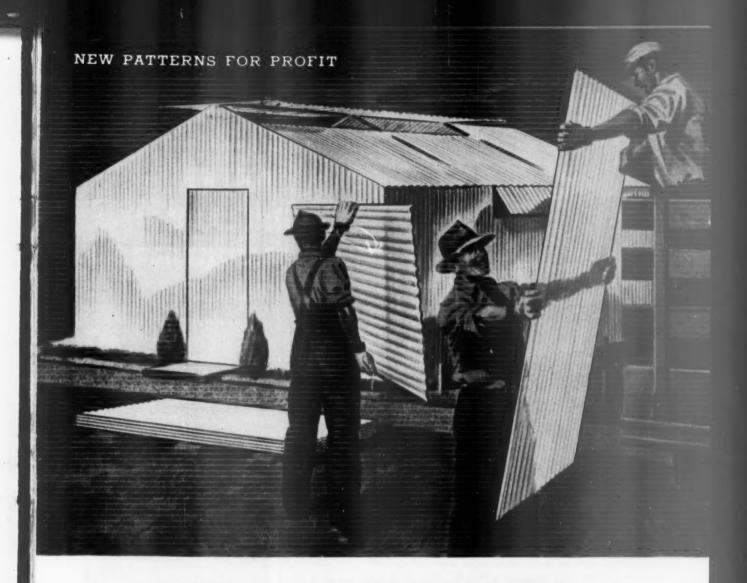
B UT you can't purchase large orders of transistors off the shelf as you would bolts, cutting tools, or electronic tubes. And you can't count on the same service that you get from conventional products.

For one thing, moisture is a bugaboo for transistors. It is pure poison to the units, and can ruin their operation. Recently, one hearing aid outfit had troubles when moisture crept into its customers' equipment (BW—Apr.25'53,p 196).

The answer to that problem, say the manufacturers, is hermetically sealing transistors in a solid material or vacuum—which is already being done with some types. But there's one hitch to that approach. It was pointed out last month by Donald G. Fink, co-director of Philco Corp.'s research, at the Western Electronic Convention in San Francisco. If "bottling" finally becomes necessary, Fink said that "the transistor will have journeyed a long way back to the construction (requirements) of the vacuum tube."

Right now, the industry hopes that transistors will overcome some of the production as well as the technical drawbacks of tubes. But possibly it will have to compromise and adopt one or two steps of a tube assembly line for transistors.

THE chances are that for the next few years the manufacturers will have to up their quality control on transistors, and boost their standards for raw materials, assembly, and storage. That will help them over the difficult period of shifting from manual to mechanical methods of production. Right now, a couple of manufacturers are tooling up for automatic production.



### Will Construction of Shatterproof Greenhouses Add New Zip to the Building Boom?

Something new is ready for an old business: shatterproof plastic panels for commercial and private greenhouses.

The "clear" translucent panels transmit 80-90% as much light as pure air. They are weather-resistant and strong . . . will support 150-175 lbs. on 24" centers. Hail or baseballs just bounce off! The panels won't rot, boring insects and termites do not attack the material. And most important, greenhouse maintenance is cut to the vanishing point.

Greenhouse operators who "pioneered" with reinforced plastic greenhouses report surprising results: Because of diffused light, leaf burn is controllable; shadeloving and sun-loving plants grow well side-by-side.

Builders can tap a vast undeveloped "hobby" market.

Commercial greenhouse manufacturers can capitalize on the huge replacement market among commercial growers.

If you're in the building business (or if you'd like to build a greenhouse) send 25 cents in coin or stamps for the detailed, illustrated plan of the 16' x 24' greenhouse shown in the illustration. The speed and ease of construction will give you lots of ideas on how you can use these panels, PLUS a ready-to-use greenhouse plan. Except for four 2" steel pipe corner supports in 12" concrete footings, it is entirely aluminum and reinforced plastic. The greenhouse is expandable in any direction, reduces framing at least 25%, and requires no concrete or wood sills because the reinforced plastic panels go right into the ground.

Monsanto is a major producer of STYRENE MONOMER, MALEIC and PHTHALIC ANHYDRIDES... basic chemicals used in the manufacture of polyester resins. Translucent building panels made of polyester resin and fibrous glass are just one of hundreds of products made of these materials. For more information on how polyester glass fiber iaminates can be used in general manufacturing... write or call MONSANTO CHEMICAL COMPANY, TEXAS DIVISION, TEXAS CITY, TEXAS.



SERVING INDUSTRY ... WHICH SERVES MANKIND



THE PRESIDENT LEARNS ABOUT LUBRICATION OF AN OVERHEAD CRANE

### "Farval saves 3,250 production hours, saves lives, too"

The Problem: An overhead traveling crane in a steel mill was out of production 30 minutes each day for necessary lubrication. Grease-gunning 40 bearings by hand—high above the mill floor—meant daily flirting with death.

The Solution: In 1927, a Farval lubricating system, costing only \$288.73, was installed. This was the first application of centralized lubrication to an overhead crane—properly lubricated ever since from one safe central location. Lubrication now takes less than 5 minutes!

The Savings: Over 3,250 production hours! Thousands of dollars in replacement parts, labor, lubricant. Most important of all, lives safeguarded and saved!

This first of nearly 5,000 crane installations shows the tremendous savings possible with Farval—in production time, bearing expense, man hours, lives! Write for our Free Lubrication Survey to learn how Farval can help you!

### WRITE for: Free Lubrication Survey

Without obligation, we will send one of our lubrication engineers to inspect your plant equipment and present a written analysis of what Farval can do for you.

**Bulletin 26** 

Illustrated 20-page book tells the full story of Farval, how it works and how it can save you money. FARVAL is the Dualine system that hydraulically delivers oil or grease, exactly measured, to each individual bearing as often as desired. You'll recognize Farval on any properly lubricated machine by the familiar valve manifolds, dual lubricant lines and central pumping station.

### THE FARVAL CORPORATION

3284i East 80th St., Cleveland 4, Ohio Farval is an affiliate of The Cleveland Worm & Gear Co. Represented in Canada by Peacock Brothers, Limited

### Rayon Goes After High-tenacity Market

The newer synthetics like Dacron, Orlon, Dynel have a way of stealing the spotlight in the textile business. But rayon, oldest of the man-made fibers, keeps on making records.

Take the tire cord business. Rayon got into the act in 1934; by the late 40s it was in top place. This summer it has been casting an eye on the high-tenacity end of the business now dominated by nylon.

• Improved—Du Pont introduced Super Cordura as a tire cord (BW-Jul.18'53, p64) and this week Rayonier, Inc., has come up with Rayocord-X, an improved type of cellulose high-stretch rayon spinning. Rayonier's new product will be used for tire cord, but it may have an even brighter future elsewhere in the textile industry.

Laboratory tests show it has high strength, resistance, and toughness. Chemists say that's because the individual filaments are practically all tough skin around a tiny core. The core is the weak point in conventional rayon.

Fabrics made from the new hightenacity rayon possess strength up to twice that of conventional rayons. They will also wash and wear better.



### Sniffing for Gas Leaks

Public Service Co. of Northern Illinois, division of Commonwealth Edison Co., needn't rely on the noses of its crews any more for detecting natural gas leaks. The company's 225 crews have been equipped with gas sniffers, called Explosimeters, made by Mine Safety Appliance Co. The portable units (above) can spot gas under conditions where detection is impossible by smelling.



SAFER,
SURER STOPS
on any
hauling job!

Smooth, Sure-Acting Bendix-Westinghouse Air Brakes Step-up Schedules, Safety and Profits on Rugged Runs!

How would you like to shorten schedule time? Step up driver efficiency? Increase your margin of profits? Obviously, you would ... and you can by simply following the lead of the men who operate the big rigs over the rugged Rocky Mountains. Here, under the taughest, most demanding conditions, fleet records show Bendix-Westinghouse Air Brakes help answer all three questions. That's because these mighty brakes deliver the extra stopping power and performance that assure maximum control—anywhere, any time. As a result, unnecessary slowdowns are eliminated because drivers know they can stop. Thus, trip speeds can be increased, heavy payloads carried safely. In addition, Bendix-Westinghouse Air Brakes require less maintenance—overhead comes down because trucks stay on the job instead of piling up expense in the shop. So just add up all the advantages. No matter what your hauling job you'll find you're 'way ahead in both performance and profits with Bendix-Westinghouse, the world's most tried and trusted air brakes!

Bendin-Westinghouse



BENDIX-WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY
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Canada's First Bank Coast-to-Coast

New York: 44 Wall Street

San Francisco: 333 California Street

Chicago: Special Representative's Office: 38 South Dearborn Street

Head Office: Montreal

575 BRANCHES ACROSS CANADA ... RESOURCES EXCEED \$2 BILLION

### PRODUCTION BRIEFS

Automatic transmissions have replaced heaters as the most popular optional product on Buick's Super Series, says I. L. Wiles, division general manager and a v-p of General Motors. Power brakes have climbed into third place on the Roadmaster models, being requested on 80% of them.

Germanium has been found in parts of Ohio by the U. S. Geological Survey. The source is the ashes of coals from 17 Ohio mines. So far most domestic production comes from Missouri, Kansas, and Oklahoma, where it is a byproduct of zine refining. Germanium's most critical application is in transistors and other electronic parts.

Industry expansion: American Can Co. has opened a 400-million-can-per-year plant at Lemoyne, Pa. . . . Bethlehem Steel Co. has copped the biggest subcontract, dollar-wise, for the Atomic Energy Commission's gaseous diffusion plant at Portsmouth, Ohio. Peter Kiewit Sons' Co., the prime contractor, awarded a \$10.6-million job to Bethlehem for the materials and construction of one building at the plant. . . Du Pont plans a \$3-million mine and plant for ilmenite, the raw material for titanium metal, near Lawtey, Fla.

Reinforced plastic is being used in making big truck trailers. Strick Co., Philadelphia, says the advantage is a weight saving of 1,000 lb. The company has designed the trailers with skylight-type roots. The plastic sections for the sides are molded from fibrous glass and Vibrin, a resin made by U.S. Rubber Co.'s Naugatuck Chemical Division.

The forest products department of Michigan State College, East Lansing, has started a course called packaging technology. It covers such fields as wood applications, manufacturing processes, and business administration. Before graduation, one final requirement is 16 weeks of work in industry.

Company print shops using photo-offset processes are described in a booklet published by Minnesota Mining & Mfg. Co., St. Paul, Minn. Called Executive's Manual, it tells company brass how to get the most from printing departments, by describing the operations of other firms, big and small. Three-M's address is 900 Fauquier Street, St. Paul 6, Minn.

A 21-in. video tube developed by Westinghouse Electric Corp.'s electronic tube division is shorter than standard, but gives a bigger picture. To make up



## Why standardize freight cars

—like the PS-1 Box Car—the PS-2 Covered Hopper Car and the PS-3 Hopper Car?

These cars, the result of tested design and continuous production, are standardized in order to produce stronger, longer-lived, more economical freight cars for the railroads.

Their designs are the products of Pullman-Standard's engineers—engineers with the experience and resources to create, to develop, to improve and to thoroughly test vital components and complete cars. Their construction reflects the advantages of continuous production. It makes possible the economies of specialized tools and techniques. Their stamina and continual improvement are influenced by laboratory testing by research engineers, and "on-line" checking by Pullman-Standard service engineers.

50,000 PS-1 box cars have gone into service for 56 railroads proving that standardized cars are a sound, revenue-building investment.



Facts about these cars are included in three new bookets. • Write for a copy of any one, or all three.

WORLD'S LARGEST BUILDER OF FREIGHT AND PASSENGER CARS

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# It took seconds the old way

This 5" diam. forged torque converter shaft requires high precision counterbored sections on the outside and inside flange faces.

Previously these operations were done on machines using high speed cutting tools. Two men working at two machines without automatic control of the time cycle performed the operations cited in average time of about 120 seconds each. This method presented quite a problem in tolerances, time and cost. Then along came the-

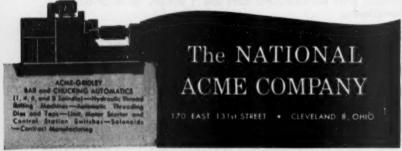
### ACME-GRIDLEY CHUCK-MATIC single-spindle automatic chucking machine

the powerful 12"

Two of these Chuck-Matics are now placed side by side, one for counterboring the outside of the flange, the other for the inside. Both employ carbide tipped tools-for cuts as fast as tools can take it; both operate at the definitely controlled cycle time of 29 seconds, and one man runs both machines. These facts account for the 4 times faster output.

If you have a chucking problem of tolerances, time, man hours and costs, ask our engineers to show yours how the Chuck-Matic can help solve it-Bulletin SC-46.

REMEMBER: Industry can't do TODAY'S job with YESTERDAY'S toolsand be in business TOMORROW.



for the shortness, a new kind of electronic gun spreads the picture across a bigger area of the picture screen. The big feature is that the tube cuts down cabinet space.

Two new departments have been formed by General Electric Co. One in the electronic division will specialize in station equipment for color and monochrome video, industrial radio, microwaves, and germanium products. The other is called the aircraft nuclear propulsion department, will be located near Cincinnati.

Beer isn't affected by fluoridation of a local water supply. Anheuser-Busch, Inc., has come to that decision after studying the fluoridation program of the city of St. Louis. In Milwaukee, most of the brewers are also going along with the city's program. Pabst Brewing Co. is the only hold-out, says it will remove the fluorine from its malted beverage.

Measurement tables for petroleum products have been changed by a joint project of the American Society for Testing Materials and Great Britain's Institute of Petroleum. The tables cover the methods of measurement used in the U.S., in the British Commanwealth, and in countries using the metric system. The tables can convert weights and volumes where more than one system is involved.



### Radioactive Fire Alarm

The fire alarm system (above) designed by Minerva Detector Co., Ltd. (Richmond, England) is said to have a service life of 1,000 years. At the heart of the device are small cells containing a radioactive material, which sensitizes them. Traces of smoke from a fire trigger the sensitive cells; an alarm sounds on the control panel. Each cell can protect from 20 yd. to 50 yd. of floor space.

Why not increase typing production cheaply?



It costs only



a day

to trade in typewriters at 5 years instead of ten And your brand-new Royals
will turn out
more work faster and easier.

You save on the average only 1 cent a day per machine by keeping typewriters 10 years instead of five.

You therefore spend only 1 cent a day for each brand-new Royal Standard when you trade in at 5 years. Advantages? Plenty . . .

- . boosted morale
- . . better employee relations
- ... clean, crisp typing that does credit to your business
- ... better work done more easily
- ... and more work done faster.

New Royal Standards have many features found

on no other office machines. In business offices, they are the  $2\frac{1}{2}$  to 1 favorite among people who type. So they must offer something more.

Call your Royal Representative. Let him show you the finest, most rugged precision writing machine ever built. Royal Typewriter Company, Inc., 2 Park Avenue, New York 16, New York.



STANDARD

ELECTRIC

PORTABLE

**Roytype Typewriter Supplies** 

Call your Royal Representative (He's listed in the Classified Telephone Directory)





### New notion of motion!

You're sitting pretty when you equip your chairs with Bassick "Diamond-Arrow". Casters. Unique Bassick two-level ball-bearing construction gives the easiest, smoothest swivel action. There are sizes for all types of office equipment . . . and for beds and furniture in your home. Soft rubber tread or solid composition wheels. For wood or metal furniture. Check your office supply or hardware dealer.

### Comfort's there under your chair!



Chair makers have the right angle when they manufacture swivel chairs with Bassick "Flo-Tilts". This tilting and swiveling mechanism gives quiet and smooth action . . . comfortable and safe balance. Tilting is controlled by long-lasting rubber torsion unit — no metal springs to break. Leading brands of office chairs have "Flo-Tilts", because their makers





MARING MORE RUBES OF CASTERS... MARING CASTERS OF MINE

### **NEW PRODUCTS**





ELECTRONIC MACHINE (right) developed by Remington Rand eliminates the old hand tally of inventories, keeps track of many thousands of mail order items in . . .

## Up-to-the-second Inventory

Ever since the first electronic computer appeared on the horizon, industry has been looking for a device to take over the monotonous chore of adding and subtracting the thousands of items carried in an inventory. This week it looks as if Remington Rand, Inc., has come up with the answer, in the form of the Distribution.

Distribution was designed for John Plain & Co., Chicago mail order house. It's used to tally orders and to keep information up to the minute for buyers. With slight modifications, it looks like a practical solution to the inventory problem for any business or factory that keeps a perpetual record of a large number of catalog classifications.

• Done by Hand—Before it adopted the new system, Plain needed scores of clerks to do what the machine can now do in seconds. The clerks had to tally each new item, record it in the proper catalog, and add the new totals manually. When a customer's order came in, the clerks had to find the correct tally book for that catalog number in a file of huge books, flip to the right page, mark down the entry to indicate that the item had been ordered. The information then had to be summarized for the benefit of buyers as well as for inventory control.

During peak seasons, the company handled 15,000 orders per day. Figuring an average order of 10 items, this meant 150,000 items a day. It took a week or two to get the data in shape for the company's buyers. But by that time the information was obsolete.

• "Magnetic Memory"—The mathematical wizard that does all this work electronically is housed in a cabinet about 7 ft. long and 6 ft. high. Ten keyboard devices, which look like hand adding machines, feed in the information. The nerve center is the "magnetic memory" developed by Remington Rand for giant electronic computers.

The magnetic memory is a rotating drum with magnetized channels around the circumference and along the longitudinal surface. Each catalog number has an "address" on the drum, where the existing total is registered. When a new item is processed into the drum, the entire system is scanned for the catalog number "address" and the new total is added to the proper catalog number.

• Half a Second—Here is how the system works. An operator at one of the keyboards receives an order, and presses the proper keys to indicate the number of items and the catalog classification number. As fast as she completes one operation, she can start on the next because the machine has already added or subtracted the items in the proper categories and displayed the new totals

# 60° below ... and no freeze-up!

Seem incredible? It isn't with U.S.I. Permanent and Super-Pyro Anti-Freeze... for even if the mercury dropped that low, today's anti-freeze keeps the nation's individual and industrial traffic on the move all winter long. U.S. Industrial Chemicals Company, a division of National Distillers Products Corporation, pioneered in the development of these anti-freezes.

Today, U.S.I. is a leader in this field, producing in vast quantity two kinds of anti-freeze: U.S.I. Permanent—one filling lasts all winter—and Super-Pyro, a volatile anti-freeze for the motorist who wants a popular priced product. If a year's production, in gallon cans alone, was stacked 2,500 in every layer, the pile would dwarf New York's Empire State Building.

U.S.1. Permanent is formulated from ethylene glycol—acknowledged to be the world's finest anti-freeze agent. Special Inhibitors—exclusively developed by U.S.1. technicians—are also blended into the anti-freeze at a precise heat temperature. This insures lasting rust and corrosion protection for all 7 metals in your car's cooling system. Special control laboratories in every plant maintain uniform product quality.

Long known as one of the country's leading distillers of alcoholic beverages, the company sponsors, among others, the famous brands listed below. National Distillers also produces petro-chemicals, solvents, intermediate and finished chemicals, and maintains a timberland conservation program. These are all part of a policy of product diversification designed to better serve the needs of both industry and individuals.



120

100

80-

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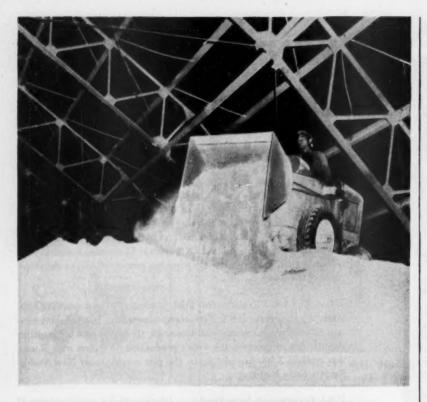
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## NATIONAL DISTILLERS PRODUCTS CORPORATION

NEW YORK S, N. Y.

OLD GRAND-DAD · OLD TAYLOR · OLD CROW · PM · OLD SUNNY BROOK · GILBEY'S GIN · HILL and HILL · BELLOWS PARTNERS CHOICE · BOURBON DE LUXE · BOND & LILLARD · OLD HERMITAGE

Old Grand-Dad, Old Taylor, Old Crow. Kentucky Straight Bourbon Whiskles, Bottled in Bond, 100 Proof. PM Blended Whiskey, 65% Grain Neutral Spirits, 86 Proof. Gilbey's Distilled London Dry Gin, 100% Grain Neutral Spirits, 90 Proof. Bellows Partners Choice Whiskey—A Blend, 80% Grain Neutral Spirits, 86.8 Proof. Old Sunny Brook, Hitl and Hitl, Bourbon De Luxe, Bond & Lillard, Old Hermitage, Kentucky Whiskles.

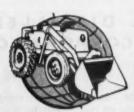


## □ OVERHEAD

This fertilizer manufacturer makes maximum use of his inside storage area by piling superphosphate right up to the roof. And his powerful, agile "PAYLOADER" tractor-shovels do the piling! — climbing to the top with full bucket loads. "PAYLOADERS" also do most of his additional handling and rehandling of superphosphate and other fertilizer ingredients.

In thousands of plants of all kinds "PAYLOADERS" are making enviable cost-reduction records in the handling of bulk materials. They scoop-up, carry, dump, spread and load . . . unload boxcars . . . work inside and outside . . . go through narrow doors and aisles, up ramps, into bins . . . they lift, lower, push and pull.

If you have bulk materials to handle, chances are that "PAYLOAD-ERS" can lower your overhead and operating costs too. Better see your "PAYLOADER" Distributor today, or write The Frank G. Hough Co., 700 Sunnyside Avenue, Libertyville, Illinois.



### World-Wide Distribution

"PAYLOADERS" are available in seven sizes from 12 cu, ft. to 1 ½ cu, yd. bucket capacity, and are sold by a vast network of leading Distributors in all principal cities throughout the free world. They have parts stocks and finest service facilities. Look for your "PAYLOADER" Distributor in the telephone classified directory under "Contractors' Equipment" or "Trucks — Industrial" or write direct.



on a visual indicator panel-all in less than half a second.

When a record of the tally is wanted, a punched paper tape is inserted in the tape reader unit. Tallies of the items specified are printed on a paper tape like those used in adding machines. If Plain wants to know how many items of a certain type have been ordered at the end of a day, the operator merely punches the catalog number on the keyboard and the total is printed.

• Source: Remington Rand, Inc., Electronics Sales Division, 315 Fourth Ave., New York, N. Y.

### **NEW PRODUCTS BRIEFS**

A hydraulic fluid that can be used near an open flame or in extreme heat conditions has been introduced by E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa. It's a noninflammable, nontoxic, noncorrosive liquid, and is said to have equal the lubricating qualities of high-grade petroleum hydraulic oils.

Power brakes are now available for field installation of most makes of cars up to seven years old according to Bendix Products Division of Bendix Aviation Corp., South Bend, Ind. The compact unit adds power braking to the regular hydraulic brakes on a car. It retails at less than \$50 (plus installation), can be hooked up quickly without special tools by any competent mechanic.

Dryon leather waterproofed by a new process developed at Battelle Memorial Institute will make its commercial debut in Buster Brown children's shoes and Roblee men's shoes next month. The process keeps rain, snow, and slush from passing through the outside leather pores of the shoe, but allows water vapor formed by foot perspiration to escape from inside.

A screwdriver is all you now need to build your own contemporary furniture. Sayres Crest Co., 1001 Broadway, Seattle 22, Ore., is introducing a line of Fabri Kits, consisting of Philippine mahogany table tops and sets of wrought iron hairpin legs. The kits will be sold nationally through department stores, hardware stores, and retail lumber outlets.

A floor cleaner to remove dirt and accumulated wax coatings from every type of floor except wood has been developed by S. C. Johnson & Son, Inc., Racine, Wis. The new product, called Kleen Floor, contains no abrasives or caustics and is noninflammable, harmless to hands and clothing.

# At last a strong, rigid structural material that is light!

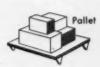
### What Aircomb Is:

a honeycomb core of Kraft paper impregnated with a phenolic resin. In use it is sandwiched between faces of material such as wood, plywood, aluminum, magnesium, steel, paper, glass laminates, phenolic, masonite, porcelain enamel or concrete. It is shipped pre-cut in any thickness from 1/16" to 5". Engineering advice on how to adapt it to your needs is available.

# AIRCOMB

The Douglas Aircraft Company, with unmatched experience in the use of strong materials of light weight, developed this remarkable new product for industry. In relation to weight AIRCOMB is (a) sixteen times as rigid as steel; (b) the strongest structural material you can buy!

AIRCOMB provides excellent natural insulation, soundproofing, fire-resistance, pest resistance and durability. Efficiency of any or all of these qualities can be further increased by special treatment.













Building Spandrels

AIRCOMB is a product of Douglas Aircraft Co., Inc.



Manufacturing rights in foreign countries are available







**Display Boards** 

Marine Applications

AIRCOMB Section, Douglas Aircraft Company, Inc., Dept. L-24

Please send descriptive brochure and a sample of AIRCOMB.

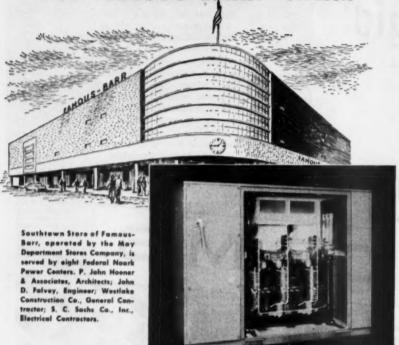
3000 Ocean Park Boulevard, Santa Monica, California

Company...

Position.

State.

# IT'S FEDERAL NOARK SWITCHGEAR FOR FAMOUS-BARR — ST. LOUIS



THE NEW Southtown Store of Famous-Barr, St. Louis, Mo., is designed for modern requirements in every detail, including its all-important electrical distribution systems. These systems employ Federal Noark Power Centers to assure maximum voltage conditions and peak efficiency at all times and at least cost.

### "Tallored" for load requirements

Federal Noark Power Centers are factory-assembled from standard components to meet individual specifications, and they are very economical to install. Maintenance is simple and reduced to a minimum. And, highly important, Noark Power Centers are remarkably flexible . . . readily moved from one location to another . . . easily changed or expanded to meet new conditions as they arise.

### A full line of control equipment

Design leadership throughout the whole range of control equipment for electric light and power has brought tremendous demands for Federal Electric products. Manufacturing facilities have had to be increased at an accelerating rate and today 11 strategically-located Federal plants are serving the electrical industry from coast to coast.

FEDERAL ELECTRIC PRODUCTS COMPANY Main Office: 50 Paris Street, Newark 5, N. J.

### FEDERAL NOARK

Plants at Newark, N. J.; Long Island City, N. Y.; Hartford, Conn.; Cleveland, Ohio; Gary, Ind.; St. Louis, Mo.; Dallas County, Texas; Los Angeles, Calif.; Sant Francisco, Calif.; Santa Clara, Calif. Affiliated plant, Toronto, Canada.



### Braves Ride Again

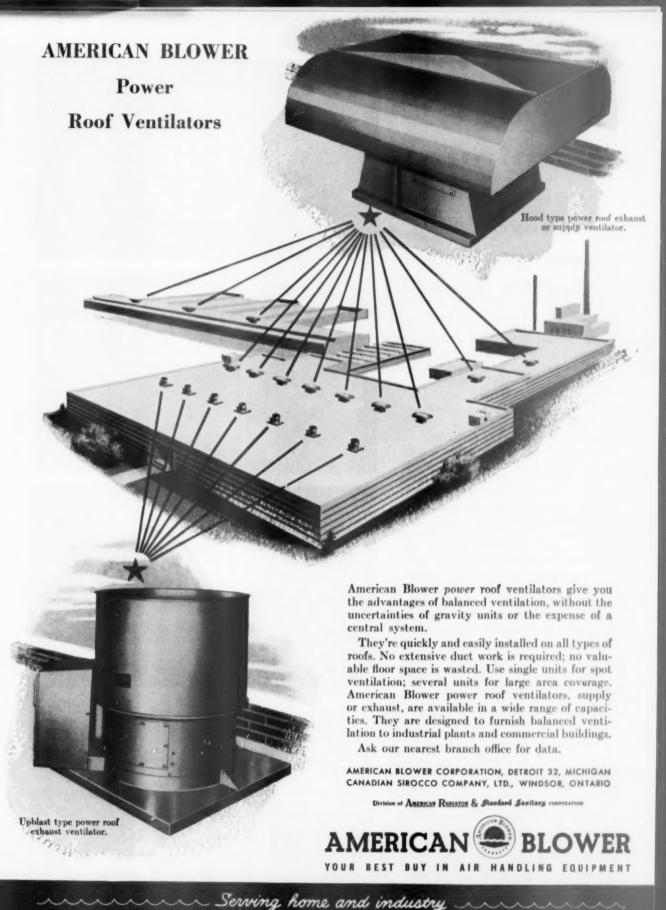
MILWAUKEE—Last year Boston had two major league professional baseball teams. The National League, the Braves, finished seventh. And over the entire season they drew a total of only 281,278 customers—less than a quarter of the attendance of the rival American League Red Sox, and one of the poorest patronage records in either major league in many years.

Just before the 1953 season began, Brave's owner Lou Perini moved the club to Milwaukee. Skeptics labeled it a desperation move, predicted the floundering Braves would fare even worse in their new home.

They couldn't have been more wrong. To start with, the Braves played winning baseball right from the first bell. By May 20, they had already surpassed their entire 1952 home attendance, with 302,667 paid admissions for their first 13 home dates. When the season ended last weekend, the Braves had accomplished the astonishing feat of breaking the all-time National League attendance record, with 1,826,397 paid. On the last Sunday of the year, with nothing at stake (the Braves were certain to finish second, no more, no less), 36,011 fans filled County Stadium to exact capacity for a double header with sixth-place Cincinnati (picture).

• Milwaukee Boon—To the city as a whole, the most important thing about the record is that it was not made up solely of Milwaukeeans. Thousands of fans flocked to the games not only from all over Wisconsin, but from Minnesota, Michigan, Illinois, Jowa, the Dakotas, and even more distant points. The influx has meant a windfall of new business to hotels, restaurants, stores.

The average Milwaukeean takes the



# How Alcoa Aluminum helps make today's safest traffic sign

Someday you may owe your life to a handful of powder-small glass spheres. Each is a reflecting lens, bouncing light with amazing brilliance. Bonded together, these beads form a reflective sheeting known as "Scotchlite". But this highly reflective material can be no more permanent than its backing. Aluminum was a logical choice.

For highway signing, an aluminum alloy was needed that would be easy to form, resist corrosion and, above all, be low in cost so these signs could be plentiful. From hundreds of tests, Alcoa Aluminum Research Laboratories found one that met all needs. Could aluminum traffic signs stand the raging winds on the highways? Could aluminum license plates last in rugged automotive service? We vibrated samples millions of cycles on special equipment to prove that they could. What surface would make the best bond? Dozens of panels were test-finished in Alcoa process labs to provide the answer. In every case, Alcoa engineers developed a method to find the inswer or drew upon knowledge gained from solving thousands of similar problems in the past.

Aluminum adds the dimension of permanence to signs reflectorized with "Scotchlite" sheeting as they work round the clock. Aluminum Company of America, Pittsburgh 19, Penna.

P"SCOTCHLITE" REFLECTIVE SHEETING IS A TRADEMARK OF THE MINNESUTA MINING AND MANUFACTURING CO.









BRIDGE RAILS of Alcoa Aluminum rolled and extruded shapes and castings keep their pleasing appearance for years—never need paint. They save many dollars in installation and maintenance.

BUS BODIES of Alcoa Aluminum sheet, rolled and extruded shapes and castings add extra payload—improve performance—increase fuel mileage. Bus builders also use strong Alcoa Aluminum for wheels, bumpers and trim.

PISTONS of Alcoa Aluminum are light and strong—improve the engine's performance because there is less weight to stop and start at the end of each stroke. Every new car has pistons of aluminum.







record itself pretty much for granted. The typical reaction: "We'll leave it way behind next year, when we win the pennant."

### Give Them an Inch . .

SYRACUSE – When the swank Skyline apartments were built in Syracuse last year, the owners tried to get concessions from the City Planning Commission permitting operation of stores in the structure, in a residential zone. Property owners along James St. —where some of the city's old mansions are located—put in a protest. The Skyline finally won, but on condition that the stores serve Skyline tenants only—that they have no signs facing the street, and no doors through which the general public could enter.

For several months, the businesses have been operating, but they have run into financial difficulty. One, a high-class cocktail lounge, ended up in bankruptcy. So last week the Skyline asked for permission to open the stores to the general public—to put up signs, and to conduct business in the residential zone much as a hotel would conduct business in the general business

The petition was bitterly opposed. And this week the City Planning Commission gave its answer: No. Next move seems to be up to the Skyline.

### Tax That Isn't Paid

DALLAS —Dallas County auto dealers got an unexpected windfall last week, for an average of \$6 a year apiece. According to Texas law, personal property taxes are supposed to be collected on everything from jewelry to money in the bank. So the county has been collecting on autos—the take came to \$257,000 last year. This year, Tax Assessor Ben Gentle announced last week, the tax on autos will not be collected. His reason: Despite the law, none of Texas' other 253 counties has ever collected it.

### Update

PORTLAND, ORE.—The feud between Portland and Seattle as to which will get the lion's share of trade with Alaska has been going on for a long time (BW—Nov.29'52,p90). It looks as if Portland has won the latest round. Last week the Civil Aeronautics Board, over vehement opposition from Seattle, O.K.'d Alaska Airlines' air freight schedule between the Northwest and Alaska—which provides the same rates from cither Seattle or Portland. Seattle interests had argued that the extra 129 mi. to Portland called for an extra 2¢-a-lb. charge.



### **HOW RIGHT IS RAIN?**

What could be righter than rain?

Permutit-conditioned water could be . . . and is!

Not that Mother Nature turns out inferior rain drops. It's just that on their way down they pick up impurities out of the very air. And continue to do so as they seep through the earth or rush down a stream.

That's why Permutit water conditioning equipment is such a vital installation in so many homes, municipalities and industrial plants. Permutit offers a fast, sure and inexpensive means for making hard water soft, turbid water clear . . . for making bad water good!

For further information write to THE PERMUTIT COMPANY, DEPT. BW-10, 330 WEST 42ND STREET, NEW YORK 36, N. Y., or Permutit Company of Canada, Ltd., 6975 Jeanne Mance Street, Montreal.

WATER CONDITIONING HEADQUARTERS FOR 40 YEARS







BROOKLYN, most populous of the bor- THE BRIDGES first opened up Brooklyn, especially the 1903 Williamsburg span (background). oughs, lies across the river from Manhattan. It poured East Side Manhattan slum dwellers into residential Williamsburg. Brooklyn

# Brooklyn: Waves from Manhattan



TODAY a third wave of immigration from Manhattan into Brooklyn threatens still further to downgrade many sections and



has led Brooklyn to a sharp reaction. These three pictures illustrate the massive program of demolition and rebuilding, both for business



Bridge (foreground) and Manhattan bridge linked business areas primarily.



SUBWAYS, completed after World War I, led to second great wave of immigration from depressed areas of Manhattan. Here Brooklynites jam Times Square station at 5 p.m.

# Break Over City in a City (Continues on page 128)



and housing designed to forestall deterioration. Most notable of all is the tremendous Civic Center, which is transforming a huge area



from Brooklyn Bridge to Borough Hall. Transportation Building (right) is the first to be completed.



Brooklyn has everything, from slums . . .



to miles of neat row houses . . .

## You Name It



SHOPPING CENTER has big stores, but Brooklynites still do a lot of their buying across the river in Manhattan.



COMMERCIAL PIERS make Brooklyn the greatest single port in the U.S. They can handle 700 ships at a time. But Manhattan,



THE NAVY YARD is by far the biggest manufacturing setup in all New York State.





POWER PLANT on the East River is the BIG FACTORIES are fairly numerous, world's largest steam plant (940,000 kw). among the borough's 7,298 establishments.



. . to tremendous apartment groups . . .



. and streets of gracious mansions.

# and Brooklyn Has It



always, as here, in Brooklyn's background, gets the glamour, passenger trade.

For one week a year, some years, everybody in the country can read about Brooklyn in his morning paper. This is one of those years, and this is the week. And for a lot of people, the Dodgers are Brooklyn. For others, Brooklyn is the home of Coney Island, and of the Navy Yard, and a bunch of people who perversely say "oily" when they mean "carly," but "erl" when they mean "oil."

Actually, of course, Brooklyn is multidimensional; its people do not all talk alike or think alike; the Dodgers—important though they may be at World Series time—are not the most important thing in life.

• What It's Not—The key fact about Brooklyn—and the basic reason why so many people know so little about it—is not what Brooklyn is, it's what it's not: Brooklyn is not a separate and independent city—it's one of New York City's five boroughs.

Put it this way: If New York State

### (Story starts on page 126)

had a law that no city could comprise more than a single county, Chicago would be the biggest city in the U.S.

Second-biggest would be Brooklyn. This tendency to think of Brooklyn as merely an adjunct of New York, and to submerge its identity in that of the greater city, conceals a lot of facts about Brooklyn that should be of considerable importance to businessmen. Most businessmen know that New York is the country's biggest manufacturing center, but they tend to think of Brooklyn as merely a dormitory for many of the workers. Actually, if New York State were to pass that law, Brooklyn would be the fifth-largest manufacturing city in the country in its own right.

• The Port—New York is justly famed as the world's greatest port; few people ever think of Brooklyn, alone, in such terms. But break New York Harbor down into its principal parts, and Brooklyn emerges without question as



SMALL PLANTS, though, really set the tone for Brooklyn's diverse industry.

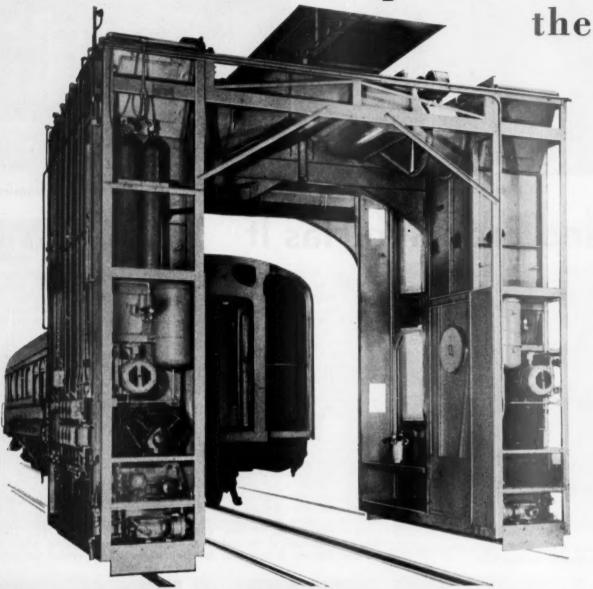


THE DODGERS, TOO. Rabid fans line up for tickets at Ebbets Field.



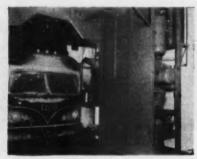
CONEY ISLAND means fun and swimming for millions beyond Brooklyn's reaches.

# How DeVilbiss put a vital



This compact traveling spray booth straddles the car to be painted. It moves along the car as painters standing on built-in elevators easily spray all surfaces. No scaffold-

ing, no excessive reaching! Scientifically located lights enable painters to see every detail of their work. Exhaust is confined to immediate area where paint is sprayed.



The Cleveland Transit System finds use of the *Traveling* Booth boosts number of total repaint jobs from eight a week to twelve or more with big savings.



The Traveling infrared drying oven, is also available through DeVilbiss. Dries vehicles in 30 minutes ... helps auto painters handle more volume.

# operation on right track

Periodically, the rolling stock of the railroads and transit vehicles everywhere must be repainted. And, until DeVilbiss introduced the traveling spray booth, maintenance departments were put to great expense in both time and labor to do this work.

A revolutionary new idea in spray booths, pioneered by DeVilbiss, brought remarkable changes — and spectacular savings.

Painters become more productive — can now work continuously without interruptions to move scaffolds or ladders. Less space is needed—only about 1/5 the space required by conventional booths. Exhaust system uses only 1/5 the normal amount of power — yet provides better ventilation since it is confined to the point where the painter is working.

One operator reports savings of over 85%. Another is painting vehicles 50% faster. There are far less motors, pumps, stacks, fans and nozzles needed, as well as the labor required to operate and maintain them. Working conditions are ideal

There are probably dozens of ways DeVilbiss products and services can reduce your costs of production and maintenance, improve the quality of your products, as well as the working conditions of your employees. We'll be glad to discuss these problems with you. Contact your local supplier, our branch office or factory.



Consultation and advice are always available from DeVilbiss jobbers and field representatives. They bring interested firms up to date on latest spraying methods.



Painters enthusiastically endorse the *Traveling* Booth, find working conditions greatly improved. Speed of travel is adjustable. Every convenience for reducing fatigue is incorporated.

## THE DEVILBISS COMPANY Toledo, Ohio

Windsor, Ontario • London, England • Santa Clara, Calif.

Branch Offices and Distributors in Principal Cities Throughout the United States, Canada and the World



the largest and most important port in the country

Brooklyn's total retail sales are estimated at over \$2½-billion a year; the total value of output of its factories at

over \$1-billion a year.

And it has the Navy Yard-by far the largest single manufacturing establishment in the whole State of New York. Contrary to popular opinion, it's not just the place where Navy ships put in to allow their crews some well-merited shore liberty. The Brooklyn Navy Yard (its proper name is the New York Navy Yard, but nobody ever calls it that) is one of the largest and busiest shipbuilding and ship-repair facilities in the world. At the peak of its operations during World War II it employed 71,-000 civilian workers. Today the figure is roughly 18,500, of whom about 12,-000 are highly skilled workers in nearly 100 assorted trades.

· Labor Force-Simply because its total labor force is so large, Brooklyn has a large force of such skilled mechanics and craftsmen. But relatively, it probably has fewer of them than many cities that are better known as heavy-industry centers-Cleveland, for instance, or Milwaukee. Where Brooklyn's labor supply shines most brightly, in the opinion of many companies with plants there,

is in its sheer size.

"There's always an ample supply of good-quality labor," says one company president. "Because the labor market is bigger," says another, "you can pick and choose your people to a greater extent. So we can get unskilled people who are intelligent-good learners-who fit quickly into our setup.

One drawback in the labor situation, says one executive whose company has plants all over the country, is that wage rates are somewhat higher in the New York area than in other cities. Productivity is also higher, he says, but not enough to make up the difference.

· Land Costs-Another handicap of a Brooklyn location-and one that also works against truly efficient manufacturing operations in the long run-is the high cost of real estate. Because land is so expensive, it just isn't economical to build all-on-one-floor plants in which flow of materials and work in process can be planned to best advantage. Just about every important factory in Brooklyn is multistory.

Brooklyn also contributes to high costs of operation in other ways. Among those cited by Brooklyn manufacturers: high taxes; stringent water-use restrictions; high construction costs, which make it expensive to expand or remodel; traffic congestion.

### I. A Mighty Port

There are, of course, many assets to a Brooklyn location that help offset

such liabilities. Most important is the waterfront. "Brooklyn is an ideal location," says one heavy goods manufac-turer, "if any appreciable part of your output is for overseas shipment." The same is equally true for a company that depends on imported raw materialswhich explains the presence along Brooklyn's waterfront of huge coffeeroasting and sugar-refining plants.

To the average American, used to thinking of shipping in terms of the Ile de France, the America, or the two Queens, Manhattan is the heart of the Port of New York. But the backbone of the port's prosperity rests not on the majestic passenger liners, but on the

squat, homely freighters.

· General Cargo-Shipping men carry that one step further. Any port's prosperity, they say, depends primarily on the volume of general cargo-as distinct from bulk cargo-that it handles. Bulk cargo is just what the name impliescargo that can be handled in bulk, mostly mechanically-such as coal, wheat, or petroleum. General cargo is anything that requires individual rather than mechanical handling for loading or unloading.

It's in general cargo that New York's lead over other ports is longest. Total U.S. foreign trade in general cargo last year came to 38.6-million tons, according to the Census Bureau. New York handled 12.7-million tons, or 33%.

And just about half of that was handled in Brooklyn. Its nearly 200 piers can take up to 700 ships at a time. The major piers are those along the Upper Bay, from the Army Port of Embarkation just above the Narrows north to Brooklyn Bridge. This stretch includes, in order, Bush Terminal, Go-wanus Bay and Gowanus Creek, the Port of New York Authority's Grain Terminal, and the New York Dock Co.

· Facilities-Each of these is different in character from the others. Although officially known as the Grain Terminal, the Port Authority's facility includes one of the port's finest general-cargo piers and one of the port's major lumber terminals as well as the 1.8-million-bu. grain elevator. The much-maligned Gowanus Creek, malodorous though it may be, is used heavily for both foreign and coastwise trade; much of the port's trade with the Caribbean area is con-

centrated there.

New York Dock Co. is the largest privately owned ocean terminal in the world. Its 30 piers have over 2-million sq. ft. of dock area, and can handle better than 50 oceangoing ships at a time. Roughly 15% of the entire port's general cargo moves over N. Y. Dock Co. piers. Just inland from the piers, the company owns a large number of warehouses and some buildings for manufacturing and processing.

Bush Terminal is much the same sort of animal, except that its emphasis is less on piers and more on waterfront industrial facilities. It operates only eight piers-though one of them is the largest double-deck covered pier in the world. But its 16 six-, eight-, and twelvestory concrete-and-steel multitenant industrial buildings have a total of more than 6-million sq. ft. of floor area. It operates its own railroad, with 35 mi. of track, its own sewer and water systems. Altogether, the company estimates, about 25,000 people work in its shore facilities alone.

• Freight Rates-One major advantage to a manufacturer of a Brooklyn waterfront location lies in New York's peculiar freight-rate structure. Most direct rail lines from the West terminate, of course, on the New Jersev side of the Hudson River. But except on shipments from very near by, freight rates to any part of the entire harbor area, via barge or car ferry, are identical to those at the New Jersey railhead. So from a rail-freight point of view, having a Brooklyn waterfront location is exactly as good as having your own siding.

· Connections-Another major advantage to industry of a Brooklyn location is the very fact that it's a part of New York. "We like to be close to our financial and banking connections," says one manufacturer. "Many companies with which we do business," says another, "have their head offices in New York even though their plants may be elsewhere." And New York is an unmatched source of supply for just about anything a company might need. "This town makes everything from artificial pearls to aircraft carriers," says one plant general manager.

• Variations—Whether the advantages or the drawbacks of a Brooklyn location are more important for a company depends principally on the business it's in. For a consumer goods manufac-

centration of consumers in the world. For other industries, it's harder to generalize. One key may lie in a survey niade recently by the Regional Plan Assn. In 1947, according to Census figures, Brooklyn had 13.1% of the factory employees in the entire metropolitan area. But in the first five postwar years, the survey showed, it got only 5.7% of the new industrial facilities. And of the 70 new \$500,000or-more plants in the area in that period it got only one-the \$1.7-million

turer, the key fact probably is that it's

in the very center of the greatest con-

Schlitz brewery.

Among companies already in Brooklyn, there are wide differences of opinion. "We like it here," says one heavy goods producer. "We wouldn't want to be anywhere else." But another company in a comparable line disagrees: "The only reason we're here," says the

# Saving \$1600 a year

on clutches alone



Model MDT Plymouth locomotive pulling a 320-ton steam locomotive to the scrap heap. This 35-ton locomotive is equipped with an Allison TORQMATIC Converter which smoothly transmits power from a 220 h.p. Diesel engine.

In September 1951, Pittsburgh Ferrous Products Company bought a Toromany bought a Toromany bought a Toromany to replace one with a mechanical drive. With his old locomotive, this scrap dealer had to replace clutches four times a year—at \$400 each. But with an Allison Toromatic Converter transmitting power in the new unit—a saving is effected of \$1600 a year on clutches alone, plus additional savings in labor and availability.

Since it was delivered, this locomotive has worked more than 4000

hours with absolutely no down time. The small 35-ton unit has pulled loads as high as 1400 tons. With the TORQMATIC Converter smoothly transmitting power, sudden jerks and jolts are eliminated, cutting wear on car couplers, scrap cars and the locomotive itself.

The Fate-Root-Heath Company, makers of Plymouth locomotives, is one of many manufacturers who install Allison Toromatic Drives in their products to help their customers get more work at less cost. For more information on how you

### ALLISON TORQMATIC CONVERTER

SIMPLE DESIGN—one-piece cast converter elements—minimum maintenance

**COMPACTNESS** simplifies installation

**DESIGNED** for power applications in the 75 to 400 h.p. range

LONGER EQUIPMENT LIFE—absorbs shock, eliminates engine lugging, cuts maintenance costs

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Allison TORQUATIC DRIVES









COMPACT, EFFICIENT HYDRAULIC DRIVES FOR CRANES \* TRUCKS \* TRACTORS \* SCRAPERS \* SHOVELS \* DRILLING RIGS \* LOCOMOTIVES

# LIFE WITHOUT FASTENERS



### Bride and Broom

It takes fasteners for a clean sweep as this startled bride has suddenly discovered. No fasteners, and it's back to the broom! Fortunately this doesn't really happen to bright new vacuum cleaners. But it serves to emphasize the importance of fasteners to modern appliances . . . as well as most other products.

Yet, despite their importance, the cost of the fasteners that are used in a single unit of a product represents a relatively small part of the total material cost. So you can always afford to use the type of bolts, nuts or screws that look best and do the job best.

Our fastener engineers will be glad for the opportunity to review your fastening methods with you—without obligation, of course.

THE LAMSON & SESSIONS CO. 1971 W. 85 St., Cleveland 2, Ohio. Chychad & Rent, O. . Birmingham . Chicago.



The home of "Quality Controlled" fasteners

president, "is because we were founded here over 100 years ago." There are many who agree with him.

• Moving Costs—Why don't they move out, then? For most, the cost would be too high. "It's not only the cost of a new plant," says one. "We have a labor force here now that's trained to our type of operation. We'd go bankrupt in a new location before we could

develop comparable skills."

Some do move out-more than move in, as a matter of fact. Yet the number of factories in Brooklyn is constantly growing. The secret is that Brooklyn is an incubator of industry. Small businesses are constantly being started there. A couple of machinists, perhaps, will get tired of working for someone else and start out for themselves in the back of a garage. They'll prosper and grow; soon they'll get too big for the garage and move to a rented loft; still later they'll buy a building. When they outgrow that, and have to build for themselves, there's a good chance they'll move out, to Queens or Nassau, or New Jersey. But in the meantime, 20 or 50 or 100 more just like them will have started up.

• Small Factories—The statistics on industry size bear this out. Of Brooklyn's 7,298 factories in 1947, only 401 had 100 workers or more, and only three had over 2,500. More than 5,000 had

fewer than 20 employees.

That's the reason why Brooklyn has no industrial areas comparable to those in most cities. Even near the waterfront, there isn't a single industrial plant in the whole of Brooklyn that is more than a couple of blocks from residences. One sample block, diagonally across the street from one of the country's major breweries, has on the corner a four-story brick tenement with a lunchroom on the street floor. Next to that is a vacant lot, then a small warehouse, then a very old three-story frame one-family house. Then an auto-body, collision-repair shop. And finally three more four-story tenements, with a drugstore in the corner one.

That's probably as close as you can get to a block that could be called "typical" of Brooklyn. But basically, there is no such thing as a typical Brooklyn block. Brooklyn's "look" is like the mocking bird's song: It has none of its own, but resembles all the others in turn. Take its residential areas for instance (pictures, page 128). Depending on where you go you can find slums, or row houses, or brownstone fronts, orderly rows of huge apartment houses, great gracious mansions on beautiful tree-lined streets.

### II. Mosaic of Villages

Probably the basic reason for this variety is that Brooklyn as it is today

# Job Training is easier with Recording Tape

Tests prove that oral job training works. Sound helps people learn faster, remember better. That's why so many businesses today rely on the clear, life-like reproduction of Soundcraft Magnetic Recording Tape as an easy, effective way to speed up their training programs.

For information on Soundcraft Magnetic Recording Tape, write:

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Dept. M-101 10 East 52nd St. N. Y. 22, N. Y.



### GOES PLACES IN NARROW SPACES

Revolvator Go-Getter Powered Hand Truck permits maximum use of storage or productive areas. The compact model shown above is a Hi-Straddle Lift with fingertip control—fully automatic 200° turning arc—slight operator training. Let us know your problem and we'll help you solve it.

Write or Phone

### REVOLVATOR CO.

8711 Tonnele Avenue, North Bergen, N. J. UNion 3-8120 is an amalgamation of no less than 26 villages—at one time clearly defined and separate—that gradually grew together. One of the first, settled by the Dutch, was Breuckelen, just across the river from downtown Manhattan. As time went on, other areas were settled—Gravesend and Flatbush and New Utrecht by the Dutch, Brooklyn Heights by New Englanders, Williamsburg by the English and the Germans, Bay Ridge by Scandinavians.

Over the years they grew and expanded, were absorbed by what had been Breuckelen. Finally, in 1898, they became part of New York. But with all this, Brooklyn's basic character stayed pretty much the same; it was still a genteel, relatively well-to-do residential town. Even the building of the Brooklyn Bridge, in 1883, didn't change things a great deal.

• The Bridge—The first big change came in 1903, with the completion of the Williamsburg Bridge. Where the Brooklyn Bridge had connected the business section of Brooklyn with the business section of Manhattan, the new bridge connected the jammed slum areas of Manhattan's lower East Side

with residential Williamsburg.

It was like pulling a cork out of a bottle. The slum dwellers—mostly Jewish—poured into the relatively open, clean areas across the bridge, and the original settlers—mostly German and Irish—retreated before the wave, first into Bushwick, then into Ridgewood, eventually into Queens.

• The Subways—The second big change came during and right after World War I. This time the influence was the building of the subways, which opened all of Brooklyn just as the bridge had opened Williamsburg. Again the relatively open, clean areas of Brooklyn attracted the residents of the overcrowded slum areas of Manhattan. And again the wave of immigration—principally Italian and Jewish this time—forced the original settlers of the areas out along the new subways back and back, many of them out of Brooklyn altogether.

 Third Wave—Today the character of Brooklyn is changing again. A third big wave of immigration is moving in; this one is made up primarily of Negroes and Puerto Ricans. Again the old residents are being pushed back to make room.

There's no transportation reason for this wave. But the other factor—the lure of the less-crowded areas of Brooklyn for the residents of the jam-packed Manhattan slums—is working even more strongly. "A basic reason why Brooklyn is sor big," says one observer, "is that Manhattan is so small. For 50 years, Brooklyn has been getting the overflow."

That overflow, inevitably, has been



### But...then what happens?

Will the alarm be sent automatically and immediately to the Municipal Fire Department —

... or will the alarm alert only your own personnel?

The answer to that question can mean the difference between a small fire and extensive damage.

To hook up your own alarm system so that it is in direct contact with the Municipal Fire Department, get the facts about a Gamewell Safety-Engineered Fire Alarm System. One of our representatives can show you how much protection you can have, for very little in cost. Write today.

THE GAMEWELL COMPANY, Chestnut St., Newton Upper Falls 64, Mass.
In Canada: Northern Electric Co., Ltd., Belleville, Ont.





"Furnes Switches are easy to mount and wire, give dependable, trouble-free service and are attractively designed," according to Louden Machinery Co.

Sound design coupled with careful construction is the basic reason why performance-proved master switches and many other Furnas Electric controls can save you money. Immediate delivery on stock sizes. For master switch Bulletin

switch Bulletin 5204 or other control information, write Furnas Electric Company, 1121 McKee St., Batavia, Illinois.



Furnas Electric Type C Master Switch is rugged and easy to operate. Controls up to 5 speeds in each direction. 46 standard types available.





### Metal Arts Advertising Specialties

Give your business friends a Christmas gift of lasting remembrance—an attractive, useful advertising specialty from Metal Arth bearing your advertising message, seal or trademark. Hundreds of suggested items to exhouse from, including smartly styled letter openers, ash trays and memo pads . . . all made of satin-smooth bronze by skilled Metal Arts craftsmen. Each one is individually gift-boxed, ready for molling.

See your local advertising specialty jobber, or write today for catalog showing our complete line of business gift suggestions.

METAL ARTS CO., Inc.,

the classified advertising of the world of business management. For information write, wire or phone BUSINESS WEEK. made up chiefly of the very lowest economic groups. Thus, each new wave of immigration has been less well-off than the older residents it displaced. As a result, most of the areas of Brooklyn nearest to Manhattan went steadily downhill, finally degenerating into pretty squalid slums.

 Trend Reversal—Today that trend has been dramatically arrested in many parts of Brooklyn, particularly the down-

town area, by two things.

The first is public housing. Brooklyn got its first housing project—the federally financed Williamsburg Houses—in 1938. As of today, 15 projects, with 22,383 dwelling units, have been built by federal, state, and city governments. And 13 more, with 11,060 units, are either under construction or planned.

• Civic Center—The other is the Brooklyn Civic Center. One of the worst-run-down sections of the borough, over the years, was the very heart of down-town Brooklyn. It had become a true "blighted area"—a conglomeration of tenements, shabby loft and office buildings, and vacant lots, interspersed with a few factories and public buildings.

In 1944 a plan for its rehabilitation was drawn up, and adopted as part of the city's master plan. Since then the city has acquired, by purchase or condemnation, an irregularly shaped area, roughly six blocks by three, running from the entrances to the Brooklyn and Manhattan Bridges back to Borough Hall and the Municipal Building. With only a couple of exceptions (primarily the U. S. Post Office), every building in this entire section is being torn down (pictures, page 126), and the area is being rebuilt as an integrated group of public buildings interspersed with parks and plazas. In addition, private interests and the Housing Authority are redeveloping other large areas nearby.

Observers are divided on the longrange effect of this vast rebuilding. Some are convinced that the destruction of such a large area of business buildings will intensify the trend toward decentralization. Others are equally certain that the halting and reversal of the downward economic trend of this area will reverse the decentralization trend.

• Subway Funnel—The truth, as usual, probably lies somewhere between. But it seems certain that Brooklyn will always revolve around its downtown area as long as the subways from all parts of the borough still funnel through there on their way to New York (to a Brooklynite, New York means strictly the city across the bridge).

The subways have been called "the one inescapable fact in a Brooklynite's life." And it's pretty generally true. Wherever you go in Brooklyn-almost—you go by subway. If you're a true Brooklynite you do it twice a day, in

rush hours (picture, page 127). Even though Brooklyn is a very important business center in its own right, a large portion of its residents works in Manhattan. No one knows exactly how large a portion. But the New York State Labor Dept. has made some estimates, based on special surveys.

mates, based on special surveys.

• Who Works Where?—According to the 1950 Census, 3.3-million of New York City's 7.9-million inhabitants are employed. Almost exactly one-third of these—1.1-million—live in Brooklyn. The Labor Dept. surveyed all firms in the city that are covered by unemployment insurance and have 12 or more employees. In that group, it found, 15.7% of the workers had jobs in Brooklyn.

The survey draws no conclusions. But the two sets of figures seem to point inescapably to the fact that just about half of Brooklyn's workers have jobs in Manhattan. The proportion varies by industries, of course. It's reasonable to guess that perhaps as many as 90% of the workers in the financial and insurance fields commute to Manhattan every day, while perhaps three-fourths or more of the employees in retail food stores may work in Brooklyn.

There's a lot of variation among types of jobs, too. For a stenographer living in Brooklyn, the odds might be as high as 10 to 1 that she would work in Manhattan. For a saleswoman they might be 50-50. And for a shipfitter, the chances would be at least 10 to 1, and probably better, that he works right at home in Brooklyn.

• Satellite—The subways have also had a profound effect on the cultural life of the borough. Four decades ago Brooklyn had a thriving group of legitimate theaters. The Metropolitan Opera used to give performances there; so did various symphony orchestras. Today there are no legitimate theaters left. The opera doesn't come over any more. And the single short series of concerts by the Boston Symphony Orchestra is none too well attended.

The subways have simply made it too easy to get to Manhattan. And while Brooklynites will go to Manhattan for their theater or their music or their fine restaurants, Manhattanites will never come to Brooklyn.

The same habit pattern applies equally to Brooklyn's retail buying. The average Brooklyn housewife doesn't automatically buy at Abraham & Straus or Namm's; she shops at Macy's or Altman or Saks-5th before she decides. How many Manhattan housewives ever shop at Abraham & Straus?

No matter what facet of its life you look at, you can never separate Brooklyn entirely from the rest of the metropolitan area of which it is a part. That is at once Brooklyn's blessing and its curse.



There probably isn't a thing you buy that you couldn't buy cheaper. Provided, that is, you didn't figure the real cost—provided you weren't concerned with getting your money's worth. Right?

But you are concerned. You buy for longer wear. You buy for freedom from trouble. You buy for fewer repairs...for more dependable service. You buy equipment to be worked—not to be laid up. You know that thrifty buying isn't merely price-tag buying.

And it's to you, the thrifty buyer, that we like to sell Crane piping equipment. Whether it's a high pressure, high alloy valve or a ½" malleable pipe fitting, every unit in the Crane line is built to last longer with fewer repairs and lower servicing costs. That's why year in and year out thrifty buyers have put more Crane Valves in service than any other make.

Crane Co., General Offices: 836 S. Michigan Ave., Chicago 5, Illinois. Branches and Wholesalers Serving All Industrial Areas.



# CRANE

VALVES . FITTINGS . PIPE . PLUMBING . HEATING



For quick, safe packaging...
of delicate light bulbs, Grumman uses PERMACEL Paper
Tape. No doubt there is an important use for PERMACEL
on your jobs. Our Tape Engineering Service can give you
the answer... without obligation.

PERMACEL PRESSURE SENSITIVE

PAPER TAPES

Permacel Tape Corporation, New Brunswick, N. J.



ONSTAGE at the Colonial Theater in New York, NBC colorcasts dancers from the Hit Parade show. The demonstration of color TV was microwaved to Chicago for a closed-circuit

# Color TV: Big Hit-



LIGHTING is tricky-and costly-for color television. Studio officials calculate that it takes from four to six times as much light as black-and-white TV. That means more equipment.

showing at the annual meeting of the Assn. of National Advertisers. It opened admen's eyes.

## MARKETING



COMMERCIALS IN COLOR particularly wowed the agency people. The packages (right) showed up in full color, and so did the flame of a cigarette lighter shown here in action.

# and Big Problems

(Story continues on page 140)



MAKEUP for color TV takes a delicate touch by an expert specially trained. Here, theater star Nanette Fabray has wrist touched up. Actors aren't allowed to do their own makeup.



WARDROBE must be chosen with care—even more so than on black-and-white TV, where rules are pretty strict. Colors in any scene have to harmonize. All this adds to TV's mounting cost.



FINAL BLEND of color is no job for amateurs. At left, Nanette Fabray sits between a color pattern and a focus pattern while



camera is adjusted. At right, technicians work to get pickup of the gray tones just right. One mistake, and the colors go awry.



You've no doubt read or heard from time to time that one or another type of fire protection is the correct answer to your safety problem. One says foam is best. Another says water sprinklers are the answer. Perhaps carbon dioxide, dry chemical, or other media will do the trick.

What is the most effective method?

Without a thorough understanding of all conditions involved, we wouldn't hazard a guess. For fire protection, like any other scientific problem, requires (1) technical know-how, and (2) application of that knowledge. Most methods of fire safety are good . . . but only through "FIRE PROTECTION ENGINEERING"—designing, manufacturing and installing the specific type of system best by test—can you be sure of maximum safety.

So, we take all methods of fire alarm and control, combine them with extinguishing mediums—FIRE-FOG, Air Foam, Sprinklers, etc.—and compound the results by adding "Automatic" technical know-how as well as test and field experience. The result... the finest "Automatic" FIRE PROTECTION available at any price.

The subject is more vividly covered in our colorfully illustrated literature, "The ABC of Fire Protection." Write for free copy today.

'Automatic" Sprinkler



CORPORATION OF AMERICA . YOUNGSTOWN, OHIO

"... color TV—a smash hit, no doubt about it. But when, and how costly?..."

TELEVISION starts on p. 138

In Chicago, one afternoon last week, top advertising executives attending the annual meeting of the Assn. of National Advertisers sat down before ordinary-looking TV sets and watched a special closed-circuit show piped in by microwave from New York by the National Broadcasting Co.

The admen watched and listened as NBC's Ben Grauer explained that they were about to see a capsule-size variety show—in color. Grauer, still appearing in black and white, yielded the screen to a black-and-white bouquet of flowers. Then, in the dark of the NBC control room, the show's technical director spun his chair behind the console, jabbed a finger toward a waiting engineer and cried out, "Switch!"

In Chicago, a split second later, the bouquet appeared in full color. The admen opened their eyes wide.

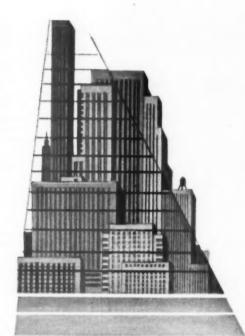
• Big Pitch—After the bouquet came several song-and-dance numbers and a bird act. Then, for the admen, came the bread-and-butter part of the color-cast: sample commercials. Several nationally known products were shown: boxes of Tide, bars of Camay soap, packs of Lucky Strikes.

It was a big, impressive pitch for color television, so impressive that even the hardened advertising men at Chicago applauded some of the sample product plugs. Television Digest called the whole thing "a smash hit—no doubt about it." The biggest question in the minds of the admen seemed to be: When can we get at it?

 Not Overnight—The answer, like so many things about color TV at this stage of the game, couldn't be pinned down firmly. However, commercially sponsored color television is still some time off.

Commercial broadcasts will not be permitted until 40 days after the Federal Communications Commission approves the so-called NTSC system (the initials of industrywide National Television System Committee), assuming the commission does O.K. it. This means that the first sponsored colorcasts could hardly be on the air before the first of the year. (FCC has only approved a test demonstration of the NTSC system for Oct. 15.)

• Who Pays?—Furthermore, who wants to pick the tab up at the beginning? The trade figures there'll be only 50,000-odd color sets in use by the end of next year. With so few viewers, the networks won't be in a position to charge sponsors for color. NBC, in



### atom city...under the seal

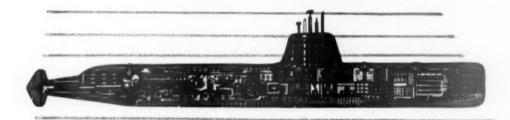
Each of the revolutionary new nuclear powered submarines now being built by General Dynamics will be practically a city under the sea.

These atom-propelled vessels, first in the world, are expected to cruise indefinitely without refueling. They must be, therefore, virtual municipalities.

Power plants...housing and feeding facilities... movies, dispensaries, libraries, administration offices...yes, and places for worship, too.

To squeeze and contract and condense these myriad components of daily living into a streamlined hull demands the utmost versatility: a tremendous range of engineering imagination and experience combined with wrist-watch craftsmanship.

Since 1880, such versatility has been a prime factor in building the reputation of General Dynamics for notable achievements in military and industrial applications of power in the air, on the land and under the sea.



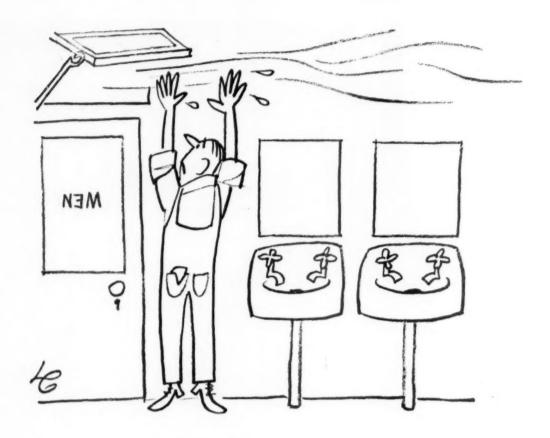
### GENERAL DYNAMICS











### **NEXT TIME...ORDER SCOTTISSUE TOWELS!**

- 1. They drink up water like an Airedale in August.
  - 2. They're strong even when soaking wet.
  - 3. They're so soft that many people use them as face cloths.
    - 4. They're clean and white of course.
    - 5. They're double-fold to dry double-quick.



EVER PLAY
"GUESS THE WEIGHT"?

ScotTissue Towels have an exceptionally high fiber content. This "bulk," plus generous size and double fold, makes a case of 3,750 ScotTissue Towels weigh 46 lbs.\* Some paper towels cost less for 3,750 but are 10 to 20 lbs. lighter\*—hence less drying power. Write for more facts. Scott Paper Company, Dept. BW-2, Chester, Pa.

\*Shipping weight

**SCOTTISSUE** 



TOWELS

Symbol of the right kind of washroom

fact, has already announced that it will pick up the tab for color during the first year of sponsored colorcasts.

• And How Much?-All this brings up a second question, also asked by the admen in Chicago: How much? By 1955, when color TV really starts to grow, advertisers will have to begin paying for it. And the networks agree that at the beginning, when capital expenses are heavy, color will be costly to put on the air. Here's why:

Conversion. The cost of converting a station so that it can rebroadcast color, but not originate it, runs from \$25,000 to \$50,000 a station. CBS says that re-equipping a conventional studio for colorcast origination costs around \$400,000. ABC says it costs more than \$750,000 to equip a color studio completely. This is three times as expensive

as black-and-white.

Equipment. A studio's first color camera costs close to \$100,000; additional ones, around \$65,000. A studio uses three or four cameras, so it's apparent that here is where the bulk of conversion cost lies. Lighting, too, is more costly. NBC figures it needs four times as much light; CBS savs six times.

Operations. More highly trained technicians and camera crews are needed for color. Producing a colorcast is a delicately balanced, highly complex, nerve-wracking proposition. Things can go wrong all of a sudden. Colors reverse, or they get out of balance; the signal may become noncompatible and fail to come through on a black-andwhite receiver.

There are other costly considerations. Makeup for actors is different, and more tricky. Costuming becomes more difficult. And everything-costumes, makeup, set, and props-must blend into a pleasing combination of colors.

Besides these, there are other head-aches. Color TV on film has not been presented to the satisfaction of the networks. And the coaxial cable, on which the networks rely heavily, won't carry the entire gamut of the color signal. AT&T relay stations must be modified. This could result in higher cable rates. • In the Long Run-Does this mean that adding color is going to send television costs permanently through the roof? Television people say no; in the long run, it won't cost much more than black-and-white.

One argument, put forth by Richard S. Salant, vice-president of Columbia Broadcasting System, holds that color's added costs are mainly in the form of capital investment and will be written off in time. "Once the amortization is taken care of," he says, "color won't come much higher-it can't, in fact; if it does, it'll die.'

Salant relies on technical developments to keep color costs from soaring. He notes that present color equipment



# VINCO helped take the "Guess" out of Involute Spline Manufacturing and gaging for INTERNATIONAL HARVESTER

Dear Mr. DeVos:

Since early 1950 you and other members of the Vinco Corporation have been working closely with representatives of our Company in solving the many complex problems involved in the design, manufacture, and inspection of involute splines. During that time you and your associates have been extremely helpful to us in taking the "guess" out of involute spline manufacturing and gaging.

Because such conferences with you have been so productive, meetings of this kind are now a "must" in our farm tractor manufacturing operations. Subsequent discussions have been most helpful in establishing designs and gages for our transmission shafts and gears.

We wish to take this opportunity to thank the Vinco Corporation for the fine cooperation it has extended to our Company. This is just another example of how companies such as International Harvester and its suppliers can, by working together, produce better products for a better America.

Sincerely.

Eric A. Wolfram

#### VINCO Can Do the Same for You

So if your next production program involves splines, call in a Vinco field engineer. He will save you both time and money

VINCO CORPORATION 9123 Schaefer Hwy., Detroit 28, Mich.





Don't count on a fireproof building for the protection of your business. All it does is wall-in and intensify a fire that starts inside an office or factory—destroying the equipment, papers and records you need to stay in business!

#### BLAW-KNOX Automatic SPRINKLER SYSTEMS

are on the job 24 hours a day. Ready to go into instant action before fires get serious—protecting your profits as well as your property. Hundreds of these automatic systems have been installed and are being paid for on an annual basis as the insurance savings accumulate. Write today for facts and figures.

BLAW-KNOX COMPANY
AUTOMATIC SPRINKLER DEPARTMENT
Pittsburgh 33, Pe. CEdar 1-0700



#### **Power** Floor Sweeper

Now the benefits of Parker power sweeping can be yours at the lowest price in the floor sweeping industry. Famous Parker "tough use" construction. Sweeps all kinds of floors. . . easily emptied . . easily maneuvered in small spaces . . pays for itself in a remarkably short time. Get our latest complete-line bulletin . . . get a Parker floor sweeper and prove its great man-saving, cost-saving operation on your own floors. Write, PARKER SWEEPER CO., \$10 BECHTLE AVE., SPRINGFIELD, OHIO.

PARTER SWEEPERS

Manual and Motorized Models

-a good part of which is made by NBC's parent company, Radio Corp. of America-is complicated and expensive. He thinks that the industry will waste little time in replacing this equipment with much simpler apparatus.

• Another View—Sylvester L. Weaver, NBC vice-president and programming chief, says that the added costs of color will be a drop in the bucket compared with the generally increasing costs of television, whether monochrome or color. He notes that coming increases "will not be due to color so much as to the spread from 20-million to 50-million TV homes."

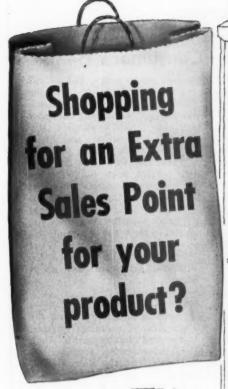
This point was nailed down in Chicago by John L. Van Volkenburg, vice-president of rival CBS-TV, who said that the cost of a half-hour show of basic network time during the prime evening hours would be nearly double between now and 1956. The present cost (for 41 stations) is \$25,827; the cost in 1956 (for 59 stations) will be about \$48,000.

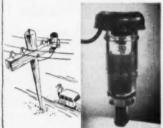
• Larger Issue—This raises the old question, as old as TV itself, of how TV is going to be paid for. But insofar as the cost question involves color alone, TV people feel that it is swallowed up in the larger one of how anyone can afford television advertising—eolor or black-and-white.

No matter what it costs, color is on Its way. The industry is already well into color. NBC and CBS, for instance, are going to educate agency people in how to build color commercials. Both are also working on training programs for their own personnel, with theaters lined up in New York City for color experimentation.

• Horse Race—At the moment, NBC has built up a bigger head of steam behind its color program than its rival, CBS. The NBC planners have arranged a lineup of "color premieres" to colorcast all important NBC programs. A number of special broadcasts will appear in color, such as the Tournament of Roses in Pasadena, Calif., on New Year's Day.

Advertisers will be watching these tests with special interest to see what they can learn about the use of color over TV. Some advertisers, in fact, have already jumped the gun with their own color projects. Sponsor magazine reports considerable activity along Madison Avenue these days. The Ted Bates agency, for example, is making color commercials for Lever Bros. Other agencies, including Batten, Barton. Durstine & Osborn, are also working on similar projects for clients. And at least one maker of television films has announced TV color plans. Motion Pictures for Television, Inc., will make its upcoming Duffy's Tavern series in both black-and-white and color.





An electric equipment company utilizes the transparency of glass to give electric utilities a lightning arrestor body that permits their linesmen to spot faulty conditions within the arrestor from the ground, eliminating a lot of pole climbing.



An electrically conductive glass panel gives a space heater manufacturer a new edge on the space heater market. Here are safety, uniform heat and cleanliness wrapped in one piece and no heating coils.



Kitchen range manufacturers find that customers like sparkling glass oven windows, easy-to-clean glass broiler plates, instant heat lamps. Glass al-



Lighting fixture manufacturers use carloads of attractive, efficient, easy-to-clean Corning glass panels as major features for fixture sales.

#### Many manufacturers have found them in glass

Glass has sharpened the sales appeal of hundreds of products by improving their looks, their life, their operation.

You can choose from more than 50,000 different glass formulas at Corning-glasses that conduct electricity, or resist it; glass that reproduces photographs; glasses that transmit light, or absorb it; glasses of special corrosion resisting properties; glasses so indifferent to heat that they will withstand temperatures up to 1800° F., or so strong that you can drive nails into hard wood with them.

Other Corning glasses absorb atomic radiation, or record exposure to these radiations; others fuse to metal to make perfect vacuum seals. And most of these glasses can be mass produced to close tolerances, in virtually any size, shape, or quantity you may need.

You'll get a new concept of glass and how it can help you improve products or processes by reading, "Glass and You." Mail the coupon today for a free copy.



CORNING GLASS WORKS CORNING, N. Y.

Conning means research in Glass

CORNING	GLASS	WORKS,	10 Crystal Street, Corning, N. Y.
Blanca sand		Hustoniad	booklet "Class and You!"

Company. Address ...

## Space-saving . . .

. . . design trend to smaller electrical equipment calls for new types of insulation

The recent rerating of electric motors and corresponding reduction of frame size by the Motor and Generator Section of the National Electrical Manufacturers Association gives new impetus to the trend toward the design of all types of electrical equipment in smaller sizes. In addition to the savings in space, these newer designs will result in reduced weight and probably in lower cost.

New types of insulation for the windings of motors, transformers and other equipment will be needed to enable the equipment manufacturers to produce these smaller designs without sacrifice of performance or service life. One requirement for the insulation is the ability to withstand higher temperature, since the wires run hotter and the housing surface for dissipating heat is smaller.

Reduction in insulation thickness without introducing the risk of electrical breakdown is an equally important factor. Irvington Varnish & Insulator, Division Minnesota Mining & Manufacturing Co., which for years has worked closely with the electrical industry in the development of new types of insulation, has been engaged for some time in research on materials which would combine the needed characteristics of heat resistance and thinness.

A polyester film with a dielectric strength of 4,000 volts per thousandth of an inch of thickness, which was developed by du Pont, has been intensively studied by Irvington in order to meet these new requirements of the electrical industry. From this research has come an almost limitless number of potential combinations of the polyester film laminated with other types of insulating materials-asbestos, Fiberglas, rag paper and many others. Thickness of the laminated materials can be varied to give any desired balance of thickness, dielectric strength and cost.

Many other instances of Irvington materials developed to keep pace with industry's needs are described in the folder, "This is Irvington." Would you like to see a copy? Irvington Varnish & Insulator, Div. Minnesota Mining & Mfg. Co., 26 Argyle Terrace, Irvington 11, New Jersey.

#### THE MARKETING PATTERN

#### Getting Inside the Consumer's Head

O GROUP OF ECONOMISTS spends more time studying the consumer than the Institute of Social Research at the University of Michigan. Since 1946, under the sponsorship of the Federal Reserve System, the institute's Survey Research Center has produced an annual survey of consumer finances. These surveys have been widely accepted (BW-Mar.21'53, p27). Now, under the joint authorship of George Katona and Eva Mueller, the institute has published a study separate from the Federal Reserve surveys. The title: Consumer Attitudes and Demand, 1950-1952

The monograph strides boldly into the question of how consumer attitudes can be measured, and the relationship between these attitudes and actual spending. Many economists consider the tremendous volume of annual consumer expenditures the most dynamic force in the economy.

Part of this spending is relatively fixed: food, rent, and the like. The other part goes pretty much where the consumer wants to put it. It may go for a new dress, a TV set, a new garage roof. Some of the consumer's income may also go into savings.

Studies show that when a relatively large portion of consumer income goes into savings, a correspondingly small portion goes into durables. Or, if spending on consumer durables is running at a high rate, saving suffers. The authors believe that what the consumer does, or intends to do, with this critical portion of his income—the durables-or-savings portion—is a factor that may provide the key to successful economic forecasting.

ATONA AND MISS MUELLER contend that a consumer's decision to spend or to save is based on his attitude. This attitude, they say, is formed by his economic outlook, his idea as to past and expected changes in prices and in his own income, and by the prevailing degree of confidence or uncertainty.

In the past, such consumer attitudes have been deduced by referring to the behavior of the forces that supposedly influenced them such things as trends in consumer income and in prices. The authors believe, however, that measuring price and income trends is not a substitute for measuring consumer attitudes directly. People's attitudes, they reason, can and should be measured by periodic studies.

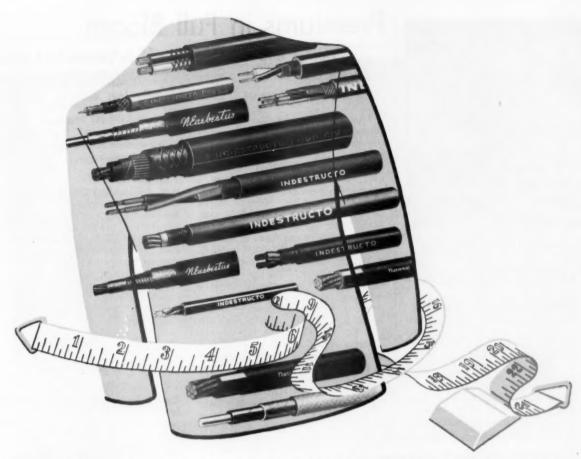
These conclusions are based on four surveys, with 1,000 families submitting to one-hour interviews in each survey. Typical of the questions asked: What have you bought in recent months? What do you intend to buy? Do you think this is a good time to buy a car? Why? Were you better off a year ago? Do you think prices are going up or down?

THE RESULTS of the first survey—taken in June, 1951—show the importance of consumer attitude. In the nine months prior to April, 1951, scare buying, prompted by bad news from the Korean front, had driven expenditures on consumer durables up to \$23.8-billion, while liquid saving dropped to \$3.5-billion. But in the last nine months of 1951, spending on durables was to fall to \$19.3-billion, while liquid saving was to hit \$12.2-billion.

The June, 1951, survey disclosed that consumers resented price rises in the face of an ample supply of durables. They were uncertain, and they didn't think it was a good time to buy. Furthermore, the survey concluded, this state of mind would continue for some time.

The prevailing informed opinion at the time, however, was that the buying lull was due to saturation of durables as a result of the heavy scare buying in 1950. Experts thought the lull would be shortlived. As it turned out, the lull continued until the fall of 1952. The subsequent three surveys demonstrated that this slow recovery from the buying lull could have been anticipated.

Katona and Miss Mueller hasten to say that their method of analysis is still in the earliest stages of development. There's much to be learned—how to interpret survey findings, for example; how often consumers actually do what they say they're going to do. But though the study is only a beginning, it's an auspicious one.



## WIRE AND CABLE ... "TAILOR-MADE" FOR YOUR NEEDS

National Electric wire and cable is readily available in many standard types and sizes . . . enough to suit virtually any requirement. But, occasionally, an exceptional case arises where proper electrical operation depends upon special specifications for integral circuits . . . loads . . . resistances . . . insulation. That's where National Electric is "tailor-made" to serve you.

As the world's largest manufacturer of electrical roughing-in materials, National Electric can assist you with experienced engineering guidance and exceptional manufacturing facilities when these special design problems arise.

In fact, many of the really important electrical wiring advances in the last 45 years were developed by National Electric in this manner.

If your product uses wire and cable or if electrical distribution is a special concern of yours—look to National Electric first. Years of aggressive leadership have made it the logical source for everything in wiring.

EVERYTHING IN WIRING POINTS TO

# National Electric Products

PITTSBURGH, PA.

3 PLANTS . 7 WAREHOUSES . 34 SALES OFFICES

World's largest manufacturer of a complete line of electrical roughing-in materials





# "Judge, I'll give you ten days...

to get a postage meter. Or I can't promise that all your campaign letters will get out on time."

"Right, Miss Abbie! Let's get one. What do you call it?"

- You call it the DM. It's a desk-model postage meter—gives even the smallest office the advantages of metered mail.
- The DM prints postage, the right amount for any kind of mail—directly on the envelope, or on special tape for parcel post...At the same time, prints your own small ad, if you like. Has a moistener for sealing envelopes.
- It can be set for as much postage as you want to buy protects it from loss, damage, theft. Accounts for postage automatically, on visible registers. Saves mailing time, and usually postage. And anybody can use the DM!
- There are other meter models, hand and electric, for larger offices. Ask the nearest Pitney-Bowes office to show you. Or send the coupon for free booklet.

FREE: Handy wall chart of Postal Rates, with parcel post map and zone finder.



## Premiums in Full Bloom

Dealer and customer incentives reached \$1-billion last year and are still growing . . . Magazines lead in bigtime advertising revenue . . . Candy lag worries industry.

The idea of a premium—the bonus offered a customer if he buys a certain product—is almost as old as selling itself. Like another ancient device, the giveaway contest (BW—Scp.26'53, p41), premium selling right now is growing by leaps and bounds.

Some idea of the strength of the trend came out last week in New York, at the 17th annual convention of the Premium Advertising Assn. of America. The association's president, Gordon C. Bowen, reported that the industry did a \$1-billion business last year and looks for a \$300-million increase in 1953.

• Bigger and Bigger—This show was a standout on several scores: more exhibits, more buyers (over 5,000) than ever before. Exhibitors were manufacturers of all kinds of products—toys, silverware, china—that could be used as premiums. Significantly, the buyers represented a greater variety of business than has ever been the case. For the first time, supermarket operators showed up in force. Every day, new companies joined the band of premium givers. Thus, last week, Beech-Nut Packing Co. announced that it is offering its first premium in 62 years in a test campaign in three New England cities.

Premiums take every conceivable form. They range from trading stamps to TV sets, tool kits, and de luxe cruises (the latter mainly to spur dealers and distributors to new efforts). Travel, in fact, has become such a popular form of incentive premium that last week Cappel, MacDonald & Co., Dayton concern that specializes in premium sales, said it was setting up a national travel division, expects to sell \$5-million worth of travel next year.

A spokesman at last week's show remarked wryly that the premium industry is only partly happy about its own prosperity. Premiums come into their own when the job of selling gets tough. Their present boom is just one more notice that that day is here.

#### Ad Breakdown

Magazines once again took the cake in national advertising dollars in 1952, Magazine Advertising Bureau reports. Grand total for advertisers who spent \$25,000 or more in national media was \$1.2-billion. Of this, magazines wangled \$503.7-million, an increase of \$36.3million over 1951. Network TV also registered a gain: \$177.8-million against 1951's score of \$126.1-million. National newspaper advertising and network radio dropped.

Despite an increase in total outlays over 1952's \$1.1-billion, MAB feels that the typical ad budget is inadequate and quotes figures like these: While advertisers in the \$25,000-plus club have quadrupled their total outlays since 1939, the average outlay per advertiser has grown by only about a third. Moreover, there's a tendency to cut down on advertising just when the going gets tough. Between 1951 and 1952, the advertising average has declined—from \$479,200 to \$476,053.

#### Tired Sweet Tooth

U.S. per capita consumption of candy, which slipped in 1951, went still further downhill last year. That's the picture brought out in a recent study entitled Candy and Confectionery Sales in U.S.—1952, compiled by the National Assn. of Tobacco Distributors.

Over-all retail sales of candy reached about \$1.6-billion last year, topping 1951 by \$4-million. On a per capita basis, though, sales dropped to \$10.56, 16¢ less than in 1951.

Not all types of candy shared in the decline. Packaged goods showed an increase of 5.5%; bulk goods also went up a little. Bars, specialties, and penny candy felt the pinch the most. These categories lost about 5.5% on a per capita basis.

• Breakdown—The reason for the tobacco distributors' interest in the data comes out when you see who got the bulk of the candy wholesaling business.

The figures:

Wholesale Group	% of Total Wholesale Volum		
Tobacco	46.0%		
Confectionery	. 35.7		
Grocery	9.9		
Other food groups	. 6.3		
Drug	6		
Miscellaneous	. 1.5		

At retail, the independent food stores claimed the lion's share of the market, with 20.9% of the total candy and confectionery dollar volume—another example of the inroads of the supermarket. Drugstores ranked second, with 16.1%.

 Weakness—The study cites two factors that hurt the business: lack of coordination of sales efforts among manufacturers, wholesalers, and retailers; and



. . . from the PRODUCT RESEARCH files of Arthur D. Listle, Inc.

# Behind Rubberset's Sales Angles

In 1942, Rubberset Company was challenged by the hog bristle shortage. Early nylon brushes had many good points; but wouldn't pick up enough paint. They had to be improved.

Could Product Research by Arthur D. Little, Inc. help? Rubberset was not gambling. They had successfully used this "outside" research before. Again, they got what they wanted. Their improved rylon brushes resulted from several research projects:

Invention of techniques and equipment for giving nylon filaments a permanent wave. This feature gives brushes greater paint pick-up capacity than hog bristle's natural wave.

**Design** of ingenious testing devices to measure research progress and compare the wear, resilience, pick-up and delivery of various brushes. The weartester showed that nylon filaments last 5½ times longer than hog bristles.

**Development** of better setting compounds to prevent filaments or bristles from shedding.

Results? Rubberset's continuous use of this "outside" research produces patented sales features which help increase Rubberset's leadership in the paint brush field.

Is Your Product a Leader? Will creative imagination improve your sales? You may find the right answer in the laboratories of Arthur D. Little, Inc., where all fields of applied science and technology are represented. Here is concentrated a greater diversity of specialized personnel and facilities than a single company can normally focus on a product develop-

ment problem. Here, scientists blend their knowledge and talents with the industrial research experience of engineers and other technologists. This team work's record of accomplishment is well known. It is ready to work with your own organization to develop new and better products with wider markets.

Our folders, "Product Research" and "A Few Case Histories" tell you more about these product development services. We shall also be glad to confer with you without obligation. Phone Boston, UNiversity 4-9370, or write:





Arthur D. Little, Inc.

normally focus on a product develop- 30 Memorial Drive, Cambridge 42, Massachusetts



# New "slant" on DELTA Drill Presses boosts output at Atlantic Service Co.

A permanent gang set-up of eight Delta 14" Drill Presses at Atlantic Service Co., Brooklyn machine shop, has actually made it possible to reduce costs while increasing production. "Even if they work only a fraction of the day, the Deltas save money every minute," says Atlantic.

Set at a 30° angle and connected to a master shaft, just one operator uses the 8 Delta drill presses to drill up to 100 holes in each piece. The tilted table is easy to clean, provides better lubricant flow, reduces operator fatigue—benefits that add up to a lowered production cost.

This new slant may well pay off in your shop: one of many ways that resourceful production men are utilizing versatile, accurate, low-cost Delta tools to boost output and save money. Ask your Delta dealer about it—he's listed in your Classified Directory under "Tools" or "Machinery." Also write for latest Delta Catalog. Delta Power Tool Division, Rockwell Manufacturing Co., 540K N. Lexington Ave., Pittsburgh 8, Pa.

DELTA QUALITY POWER TOOLS

Another Product by Rockwell



a lag in advertising. Since candy sales are primarily impulse buying, the study urges attractive packaging, better promotion and display.

#### MARKETING BRIEFS



Only a pint of Tom Moore bonded bourbon comes in this new decanter, but the package stands as high on the shelf as a fifth. Tom Moore Distillers division of Barton Distilling offers this package as its bid to the important gift market (BW—Sep.12'53,p34). Idea is that now you can buy a handsome package of bonded whiskey for under \$4, the company says.

Westinghouse has set up an eight-week factory school to prepare distributors for the day when the company's new consumer products plants are in full production. Some 25 distributors at a time will get a thorough grounding in how to sell consumer products.

Fashion show on film had its debut at the Johnny Victor Theater, New York. The show is produced and directed by Vyvyan Donner, fashion expert and woman's editor for Fox Movietone News. It will be shown at 35 department stores throughout the country—at far less cost than a live show, says its producer.

Aviation gasoline for high-compression automobiles is drawing customers into a serve-yourself gas station operated by Aaron Steitz in Glendale, Calif. Tagged as "Air Force Aviation" gasoline, it is said to have a 105-octane rating, sells for 35¢ a gal.

A state monopoly to control Indiana's \$100-million beer wholesaling business may come up in the 1955 legislature, Gov. George N. Craig revealed. If he decides to push the project, Indiana could be the first state to handle beer distribution through this method.



# Before you buy any antifreeze

... Read why some are far better for the life of your car!



Winter hasn't changed, but your car has . . . the modern automobile not only represents a major investment; it is literally an engineering masterpiece. It requires modern gasoline and oil and should be protected with a modern permanent antifreeze.

Extensive research in Dow's Product Evaluation Laboratories dramatically illustrates the fact that old-fashioned, temporary, "freeze-up" protection simply isn't enough. You may "get by" with it, but only a permanent antifreeze can give

your car complete protection against freezing all winter!

Yet tests on modern engines and cooling systems show this is only one part of the cold weather protection your car should have. In addition, your car needs protection against the costly hidden damage of rust which clogs the cooling system and ultimately ruins it; protection against antifreeze seeping into the combustion chamber; and protection against the loss of the antifreeze itself through foaming. Your car will have all of this extra, cooling-system protection with a good permanent antifreeze in the radiator.

Here is all you need do to be sure . . . insist on a permanent antifreeze bearing the brand name of your favorite gasoline, automobile or tire manufacturer. Several leading brands now offer you the new triple-protection ingredient, TRI-PRO\*. Recently developed by Dow for the antifreeze industry, TRI-PRO may not yet be available in your community. But, wherever you live, buy a good permanent antifreeze . . . in the long run. you'll find it far better for the life of \*Trade Mark your car.





# Crash of Old Smokestack Makes Way for Progress on the M.& St.L.



Minneapolis Star Photos



Tearing down a Smokestack—or any other structure—may seem like Progress in Reverse. But not on The Minneapolis & St. Louis Railway

At the Cedar Lake Shops of the M. & St. L. in Minneapolis, a big Chimney, 100 feet tall, has just been razed, along with an ancient Power House that had burned coal for three-quarters of a century. This was a wrecking job to Make Way for Progress.

The crash and dust-cloud of the Falling Stack marked another step in the M. & St. L. program for Complete Modernization of Shops and Yards, of Facilities and Equipment, all over the M. & St. L. System in four Midwest States.

New yard tracks are being laid where the old power house stood. A new plant, 1953 style, heats Cedar Lake Buildings. The M. & St. L. now buys power for its hundreds of shop machines from an electric company.

All this means more Efficiency and Economy—two things that are the Order of the Day on the Dieselized M. & St. L. When new construction is finished, the M. & St. L. at Cedar Lake will have one of America's Finest Railroad Shops. And that will mean Further Improvement in

M. & St. L. Fast Freight Service

74c MINNEAPOLIS & ST. LOUIS Railway

Modern & STream Lined



#### Air Cooler . . .

. . . sales boomed this summer, appliance men say. Yet many dealers had reason to be disappointed.

Seers who predicted that room air conditioning units would have a banner season in the summer of 1953 can relax. With the cooperation of the thermometer, which in many places chalked up some records of its own, sales of room units have outstripped 1952's high—and then some.

As far as manufacturers' shipments are concerned, reports Air Conditioning & Refrigeration Institute, volume for the first six months of this year was over three times that of the 1952 first half. This indicates that the factories, at least, may well clear out the 1-million units they have produced.

1-million units they have produced.

Dealers and distributors everywhere told business week reporters this week that sales are up—anywhere from 18% to 300% and more. Inventories varyfrom somewhat under to somewhat over last year's but no one is suffering.

• Catches—Despite all this, not everybody is happy. The air conditioner may be, as a Chicago dealer reported, "the hottest item in the hard goods field." Yet in city after city, retailers express disappointment over the summer's business. What was the catch?

There were, in fact, several catches. Catch No. 1 was normal result of growth. With so likely a product at hand, there were many new brands on the market. What's more, there were many new distributors and dealers.

Birmingham, Ala., is a good case in point. Here, over-all sales this summer were three or four times ahead of 1952's. But they were divided among some 25 distributors, against half a dozen last year. In 1952 there were maybe two dozen retailers on the job; this year there were about 75. For the average retailer, this meant a piece of pie no bigger than before.

Catch No. 2 was more serious. With few exceptions, dealers agree "You had to cut prices to sell." The appliance industry's old complaint that nobody sells at list goes even for this thriving newcomer.

Not everyone who stayed with the list price got stuck. Big-name brands and plenty of promotion did the trick for some outlets. But the case of a Rochester, N. Y., dealer who refused to cut his price is more typical. He sold 30 room units—against 100 last year. Many dealers have hacked profits to the bone to clear their floors.

It wasn't only dealers who trimmed. Many retailers complain bitterly of the



Photo courtesy Wayne Manufacturing Company, Pomona, Calif.

Chrysler powers "One-Man Sanitation Department"



For only a few cents a milewhere it used to cost dollarsany community, plant or airport can keep its streets, parking lots or air-strips clean. Thanks to the combination of modern equipment and modern industrial power, what once was an expensive 3, 4 or 5 man job, is today done better, faster and at far less cost . . . by one man.

With power from a power-packed Model 8 Chrysler Industrial Engine equipped with heavyduty, four-speed transmission, the Wayne Pick-Up Sweeper does everything in one operation. There's no need for others following behind to pick up dirt and truck it away. It sweeps up to 8 miles an hour, fills its own three cubic yard hopper as it goes along, and carries dirt away to the disposal point at traffic speeds.

This manufacturer, like others, selects Chrysler engines equipped at the factory to meet his needs in the field. Among the Chrysler options for his selection are gasoline, natural or liquid-propane gas burning carburetors, standard or gear driven front ends (with magneto or hydraulic pump drive), 12 or 24 volt electrical system.

See the Chrysler Industrial Engine dealer nearest you for complete information on Chrysler power. And remember, Chrysler engines are not expensive. Production-line methods, adapted to specialized Industrial Engine building, provide a custom-built engine at mass-production prices. If your problem is special, write: Dept. 110, Industrial Engine Division, Chrysler Corporation, Trenton, Michigan.

GHRY5LE Industrial Engines



WITH A PEDIGREE



"chiselers," the distributors who sold through the back door to "professional" people and stretched the word to cover a multitude of businessmen.

Catch No. 3 may prove the most serious of all. This summer convinced any doubting Thomas that the weather, more than anything else, decides the fate of the air conditioning market.

There is some disagreement as to how far this holds true. The August heat wave, for example, had varying effects. In Worcester, Mass., it spurred sales. In Washington, D.C., it was credited with pulling the business out of the hole. But in other places—such as Phoenix and San Antonio—one heat wave more or less cuts no ice. Still other cities found the August scorcher too late to do them any good. Customers figured they could stand the heat for the rest of the season—or else they went out and bought fans.

Nevertheless, most places found the thermometer an all too accurate gauge of sales. A Birmingham dealer tells of his experience: fine sales throughout a hot May and June. Then, in the second week of July, the temperature dropped. "Sales didn't taper off," he recalls. "They stopped cold." A Chicago dealer echoes: "Give us a few hot days in June or early July and we'll do all right. Without that we're sunk."

Some dealers are hopeful that this dependence on the weather may change. Manufacturers are doing a good job, they say, of educating people to the year-round relief of air conditioning: cleaner, more healthful air, relief from dust and allergies, and the like. At least one department store is going to make a play for the Christmas market. But, mostly, getting cool customers to buy is slow going.

• Channels—On the key question of who does the business there's difference of opinion. As a rule, the appliance dealer won out. One manufacturer estimates that appliance stores have made 75% of the sales this year on a national basis. Yet in metropolitan Pittsburgh, and Richmond, Va., department stores took the prize.

Some distributors and appliance stores grumble that department stores are giving the field a bad name. The big stores, distributors say, don't warn customers about installation costs, wiring problems (page 193). When a customer finds he has to spend money on extra wiring in his home—or when he blows a fuse because he hasn't done so—he blames the brand.

• Future Pattern—For all the catches, the industry is bullish about next year. But retailers append two ifs to their optimistic prediction: if the manufacturers get their shipments out earlier. And more important: if prices go down. "Give us a product to sell at \$200 or under, and we'll clean up."

# Bump that assures positive results

When fire strikes, seconds count...your fire extinguishers must be the right type and function properly from the very start...failure means serious losses.

The growing popularity of the highly effective powdered dry chemical fire extinguishing agent may be hampered by a drawback...settling or packing can occur after a lapse of time. However, with C-O-TWO Dry Chemical Type Fire Extinguishers there's no chance of this happening.

The exclusive inverting and bumping design of C-O-TWO Dry Chemical Type Fire Extinguishers provides mechanical breakage of the dry chemical by shifting its position in the cylinder. This outstanding mechanical breakage, plus continuous inert gas pressured agitation or fluffing of the skillfully blended free flowing dry chemical, guarantee lasting, foolproof fire protection.

No other brand on the market today gives you this extra margin for positive results. Inverting and bump-

ing is only one of many unique design advantages that make C-O-TWO Dry Chemical Type Fire Extinguishers your best buy for killing flammable liquid and electrical fires, as well as surface fires involving ordinary combustible materials.

With C-O-TWO Dry Chemical Type Fire Extinguishers the heat-shielding dry chemical is a non-conducting, non-abrasive, non-toxic, finely pulverized powder compound ... blankets fire instantly. Sizes range all the way from 4 to 150 pounds capacity . . . all fully approved by the Underwriters' Laboratories, Inc., Factory Mutual Laboratories and Government Bureaus.

Act now for complete free information on these top quality, sure acting fire extinguishers. Remember fire doesn't wait . . . get the facts today!



MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT

Squeez-Grip Carbon Dioxide Type Fire Extinguishers
Dry Chemical Type Fire Extinguishers
Built-In High Pressure and Low Pressure Carbon Dioxide
Type Fire Extinguishing Systems
Built-In Smoke and Heat Fire Detecting Systems

#### C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1 . NEW JERSEY

C-O-TWO FIRE EQUIPMENT OF CANADA, LTD. . TORONTO 8 . ONTARIO

Sales and Service in the Principal Cities of United States and Canada

AFFILIATED WITH PYRENE MANUFACTURING COMPANY

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# Philadelphia

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Your key men will have an opportunity to consult with the foremost chemical engineers and chemists of almost 500 exhibitors. The results of years of chemical research and development will be conveniently displayed on one floor. Here in a few days they can get the information that can be translated into the solution of immediate and anticipated chemical processing production problems. This spectacular exposition has been pioneering chemical progress for 38 years. PLAN NOW TO ATTEND.

Application forms for hotel accommodations are available by writing to

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#### STANDARD STOCK SNAP-APART SETS

CARBON-INTERLEAVED

CHECK LIST AND WRITE FOR SAMPLES AND PRICES BILLS OF LADING 
INVOICE SETS 
VOUCHER CHECKS 
REQUEST FOR QUOTATION 
PURCHASE ORDER SETS 
RECEIVING REPORT 
REQUISITION FORM 
SALES ORDER SETS 
CORRESPONDENCE SETS 
W-2 TAX FORMS 
Imprinted With Your Name, Etc.

10 DAY SHIPMENT-LOW PRICES



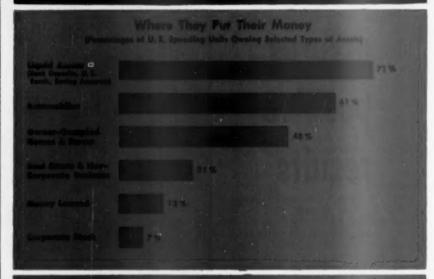
ALFRED ALLEN WATTS CO., INC. 216 William St., New York 38, N. Y.

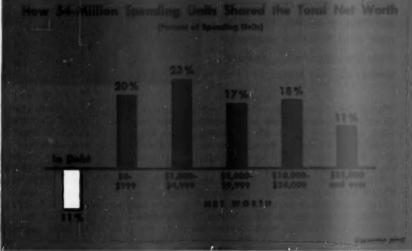
Plants: New York City Newark, N. J., Belleville, N. J.

## E CONTO MILES

WHAT INDIVIDUAL CONSUMERS OWN AND OWE ASSETS

LIABILITIES NET WORTH \$725-Billion \$85-Billion \$640-Billion





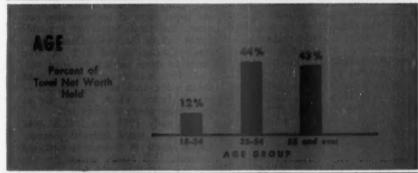
# U.S. Consumer: Statistically

U.S. consumers are worth a lot of money. The man who wrestles with bills and taxes may find it hard to believe, but the Federal Reserve Board has figures to prove it—figures dug up by some pioneering research.

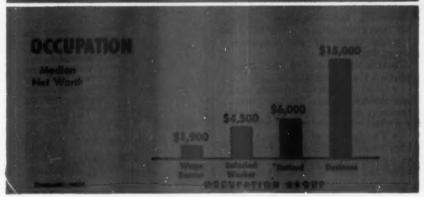
Some facts about consumer holdings have been known for a long time. Many assets show up in census figures. Some can be picked out of banking statistics. Others have been dug up by private research institutions.

What has been lacking is an over-all picture; most attempts to fit the bits and pieces have failed. Many pieces just won't fit, others are missing altogether.

 Survey—In its annual survey of consumer finances, FRB has been using the statistical technique of sampling







# He's Well Heeled

to get around the gaps and overlaps in

the existing figures.

The 1953 survey, which was conducted for FRB by the Survey Re-search Center of the University of Michigan, included a battery of questions that threw a lot of new light en what the consumer owns and what he owes. The survey polled 3,000 "spending units," which it defined as all family members living in a single household and pooling their incomes to meet major expenses.

The heads of these spending units were asked to give dollar-value estimates of their assets and debts. From their answers, the statisticians made a projection for the 54-million spending units in the United States. The results have just been published in the September

ló seconds every time you press a TIME-STUDY Actual time studies taken in hundreds of businesses show that an average of 18 seconds is required to make an "inside" speech contact through the switchboard. With AMPLICALL—your own "clear line" internal communication system—you get 2-second speech contact within and between departments. AMPLICALL frees busy switchboards for important outside calls—keeps personnel on the job, keeps talk terse—saves hours each day for any business. AMPLICALL saves you money—pays for itself. There is a system to fit your special needs. Get the full facts today! your business needs AMPLICALL INTERCOMMUNICATION ELECTRONIC 4

Fair your nearest AMPLICALL specialist, look under "Intercommunication" in your classified phone direc-tury—ar write direct for full information. SEE YOUR CLASSIFIED PHONE BOOK



# To all Basic HYSTER TRUCKS...you can add HYSTER attachments



Are your materials hard to handle? Whether you have bales, boxes, bricks, barrels, buckets, aggregates, or cylinders, your Hyster Lift Truck and the right attachment is the most effective method of moving materials which cannot be palletized. Your Hyster Dealer is a specialist in reducing materials handling costs. He can recommend the correct lift truck practices for your materials. Call your Hyster Dealer today, or write for Catalogs 1266, 1219, 1258.

#### HYSTER COMPANY

2907 N. E. Clackamas Street...Portland 8, Oregon 1012-07 Myers Street..........Danville, Illinois





FOUR FACTORIES: Portland, Oregon; Peorie, Illinois; Danville, Illinois: Nijmegen, The Netherlands

"... about four consumers in every 10 had no debts at all ..."

FRB SURVEY starts on p. 156

issue of the Federal Reserve Bulletin.
• Plenty of Plus—The results are impressive. Total assets, as defined by the survey, were \$725-billion early this year. (The figure can be expressed as just under two-thirds of a trillion dollars, if you want to feel even richer.) Against this \$725-million of assets, were total debts of only \$85-billion.

That leaves a total net worth of \$640-billion, held by individuals in the form of titles to homes, autos, bank deposits, business shares, farms, real estate, and other widely held assets. Even this colossal figure is probably an understatement of debt-free assets, since some substantial items were not included in the survey. Thus, the cash value of insurance policies, held by 80% of all spending units, was omitted. (Few people could give their exact value.) Cash was excluded, because many people won't report it. Hard-to-value items that were left out include: household furnishings, clothing, trust funds, pensions. U.S. government securities were counted, but not corporate and nonfederal bonds. While the inclusion of these items would raise the total, FRB experts don't think it would change their general conclusions about the relative size and distribution of assets.

From the composition and distribution of the \$640-billion net worth, FRB researchers gleaned some statistical gossip about the way consumers manage their assets.

• Confirmation—Some of the items confirmed the obvious:

 Older consumers typically had larger holdings than younger ones.
 Consumers over 55 held 43% of all net worth.

• The income of consumers was related directly to the size of holdings. The people who got the top 24% of income had 61% of total net worth.

• Business owners as a group tended to have larger assets than any other occupational group. The median worth of businessmen was \$15,000; wage earners averaged slightly under \$2,000.

• The great majority of spending units had more assets than debts; only 11% were in the red on net.

 Surprises—Some of the FRB findings were well off the beaten track of belief:
 About four consumers in every

10 had no debts at all.

 The value of the consumers' homes and autimobiles was almost as great as their total direct investment in business. Homes and autos accounted for 40% of net worth; business shares, 45%.

• Odds and Ends—The survey cast its spotlight on some facts that have been generally overlooked:

• Ownership in unincorporated businesses, farms, and real estate (other than homes) is much more prevalent than ownership of stock. Slightly over 25% of all spending units had money in owner-controlled businesses; only 7% owned corporate stock.

• Any sudden or severe drop in the paper value of homes, autos, real estate, and farms would eat a sizable chunk out of the \$640-billion net assets. Consumers had 85% of their assets in items subject to price risk. Only 15% was in assets with a fixed dollar value, such as bank deposits or savings bonds, which would rise in purchasing power if prices fell.

Still, early 1953 found U.S. consumers in a sound financial position. Liquid assets of consumers—checking accounts, U.S. bonds, savings deposits—were greater than total debt.

• Ratio to Income—Half of all spending units held assets equal to or greater than their 1952 incomes. A quarter of them had holdings three times or more greater than their 1952 income.



#### Sky-reaching Mosaic

Scenes of ancient Aztec and Toltec life are depicted in this giant mosaic that reaches skyward on one wall of Mexico City's new Federal Communications Building. The designs were worked out by artists on small-scale models. Then technicians reproduced a huge replica of the models, using bits of colored stone and glass set in concrete slabs. Picture shows a workman (foreground) pointing out to a woman passer-by how the squares of the design were fitted together.

### Satisfaction rests on the carton



To produce boxes with extra sales impact, Union board machines are equipped with two headboxes instead of the customary one. You get a lighter, more attractive board color:

a smoother finish; a better printing surface. And, of course, Union boxes continue among the strongest made.



Eastern Division Sales Offices: 1400 E. State St., Trenton 9, N. J. • Southern Division Sales Offices: P.O. Box 570, Savannah, Ga. Western Division Sales Offices: 4545 West Palmer, Chicago 39, Ill. • Executive Offices: Woolworth Bldg., New York 7, N. Y.



#### "IF EVERYONE WORE THAT HAT, FREDDIE..."

"I know you're just pretending, Son. But if everyone could actually be a fireman for a while, there'd be a lot fewer fires."

Your Fire Department is constantly on the alert to protect life and property. Cooperate during Fire Prevention Week, October 4th to the 10th—and the year 'round—by observing the following fire prevention rules:

Keep matches out of the reach of children...be sure your heating system is clean and does not become

over-heated...have chimneys inspected for defects... banish careless smoking habits...have defective electrical wiring replaced...don't let rubbish accumulate.

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK OCT. 3, 1953

A BUSINESS WEEK

Washington is more convinced than ever that Moscow doesn't want to talk about a German settlement for the present.

A Soviet note on Germany a few days age turned thumbs down on a recent Western proposal for a foreign ministers' meeting this month.

In the State Dept. there's a growing feeling, too, that there won't be a Korean political conference, that the Communists won't agree now to anything beyond the present truce.

Despite Moscow's present attitude, Washington is taking the possibility of negotiating an East-West settlement more seriously than ever before (page 27).

The thinking, which is still at a tentative stage, goes this way:

The new Soviet regime faces not only serious economic troubles at home but growing popular resistance in Eastern Europe. In time, these difficulties will probably force Moscow to a foreign policy retreat—unless Moscow first can get enough H-bombs to blackmail the West into a Munich.

If the race is won by internal weakness in the Soviet empire, so the thinking goes, there will be a good chance for the West to negotiate a settlement that will, in effect, push the Soviet Union back to its prewar borders.

No one in Washington today is indulging in wishful thinking about Soviet economic weakness, or its possible impact on Soviet foreign policy.

But almost every day there's news out of Russia that confirms the existence of a serious food crisis and a shift of Soviet resources from heavy industry to agriculture.

This week the Malenkov regime ordered the Soviet Defense Ministry to switch some of its production facilities from tanks to tractors. Under this order, the farms are supposed to get 5,000 more tractors in 1954 and 10,000 more in 1955 than the Five Year Plan calls for.

Soviet air and atomic progress has increased the strategic value of the defense deal signed with Spain this week. That's despite the fact that the bases-for-aid agreement with Franco is a very hazy, elastic instrument.

Dispersion of air bases, supply lines, and depots is most important to NATO's continental defenses. Britain and the channel ports, for example, are highly vulnerable to atomic attack.

The Spanish deal is something of an insurance policy, too.

It guarantees the U. S. a military toehold in Europe in the event that growing French neutralism and political weakness undermine the defensive position there. Also, bases in Spain will be immune from the political unrest surrounding our big airfields in North Africa.

Few U. S. leaders, to be sure, are especially happy about bolstering Franco—something our agreement is sure to do. But political opposition to the tie with Spain, even in Europe, has pretty well burned out during the past two years.

### INTERNATIONAL OUTLOOK (Continued)

OCT. 3, 1953

Assembly reconvenes. The forecast is for a hectic session—and the Laniel government could fall at almost any time during the debates.

The agenda is crowded and dangerous: economic policy, especially on wage demands; Indo-China; European unity; and North Africa. A budget will have to be voted for next year.

Premier Laniel will come under attack. The disastrous, near-revolutionary August strikes will hang heavy over the Assembly.

But Laniel is stronger now than he was two months ago. And he'll have vastly increased U. S. aid as a backstop.

Washington has pledged to give France an extra \$385-million in aid for Indo-China. That brings to \$785-million our spending on the war there—sure proof that the Eisenhower Administration means to buoy France and at the same time save Indo-China from the Reds.

The Churchill-Eden-Butler team has reassembled in London for the first time since the seemingly mortal breakdown. Reports are that Churchill's first item of business will call for a meeting with Eisenhower and Laniel.

The reunited cabinet faces a Conservative Party conference next week in fine fettle. Churchill's position in the party is still unassailable, and Eden commands a big majority as the heir apparent.

But the government is several shades more liberal than the party hard-core. So there'll be strong back-bench criticism of British trade policy, especially the expected failure to restore imperial preference tariffs.

There will be pressure for new elections. But Churchill doesn't want them until he has achieved some sort of spectacular deal with Moscow—a coup he still believes possible.

Then, too, there's a recent British public opinion poll that shows Labor, for all its indecision, gaining popularity.

The Labor Party managed to avoid an open split at its meeting this week. But the moderate party leadership under Attlee found its position under heavy fire.

The Bevanites, as expected, got strong support from the local party delegations, who always seem to over-represent the left wing. Only the ponderous trade union bloc stood in the way of a Bevan triumph (BW-Sep.19'53,p169).

In fact, if Bevan keeps pushing Attlee toward more socialism at home and an anti-American policy abroad, the trade unions may still split the Labor Party wide open.

The new regime in Teheran is attempting to "talk sense" to the Iranian people. In fact, Premier Zahedi is preparing them to swallow the return of British or other foreign technicians to run the oil industry.

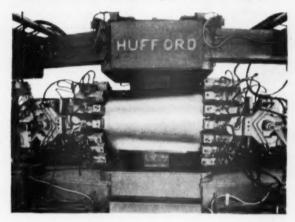
Iran's nationalized oil company, says Zahedi, is deep in the red, its facilities are deteriorating, and its workers are idle. The oil battle with Britain cost the country at least \$200-million in lost earnings. Since the takeover, oil income has been a piddling \$2-million.

Slowly—very slowly—Zahedi seems to be chipping away at hyperthyroid Iranian nationalism, the legacy of Mossadegh.

# REM-CRU TITANIUM

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Jet engine forgings made from Rem-Cru titanium

















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Practical Applications—Titanium is 40% lighter than stainless steel, but just as strong. It retains useful strength at temperatures up to 800-1000E. That is the reason you will find it being used today for an expanding list of priority aircraft and ordnance applications: compressor blades and discs and other forged parts of jet engines . . . fire walls, bulkheads, shrouds, cowling, ducting and structural members of airplanes . . . armor plate for military vehicles.

Chemical engineers are using titanium for such promising applications as condensers, evaporators, autoclaves, containers, tubing, valves and fittings.

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The machinability of titanium is similar to that of 1/4 hard stainless steels. Titanium galls readily and develops considerable heat during machining. That's why you should use sharp cutting tools, slow speeds and heavy feeds for maximum tool life and production rates.

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Availability—Today limited quantities of titanium are available for other than priority military applications. REM-CRU is producing titanium bars, plates, sheets, strip, wire, tubing, forgings and billets on a tonnage basis now. And we are currently expanding melting and mill facilities so that within a year our production will increase several fold.

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## ISINESS ABROAD



# Moving into U.S. Markets

Even before the war, Elsevier, Amsterdam—the Netherlands' largest publishing house and one of the oldest in Europe—was doing quiet spadework in the U.S. market.

Then, unknown to all but the trade and a few purchasers of weighty technical tomes, it set up an American affiliate in Texas two years ago to publish Elsevier titles. But not until last week did Elsevier take the wraps off its U.S. plans and announce its hopes of playing in the big-time U.S. publishing business.

• The Book—The occasion was the Sept. 23 publication of The Book of Health by Elsevier (pronounce it elsevere) Press, Inc., of Houston. "The Book" is a medical encyclopedia—covering everything from "A—Blood Group" to "Zymogenic Cells," from conception to death—written in layman's language and aimed at every family bookshelf in the U.S.

Every family that can afford it, that is. The Book is big, beautiful, and expensive (\$10). It hefts 5 lb., runs to 912 pages, has 1,400 illustrations, many in color. The writing and planning involved 30 editors, writers, illustrators,

and a 242-man advisory board of doctors. And even though The Book was printed in Holland, its production cost Elsevier over \$300,000—a tremendous prepublication investment for any publisher.

• May Outsell Kinsey—The Elsevier people think The Book is just what they need to make an important splash in the U.S. book business. They're talking big: John Paul Klautz, president of the Dutch and U.S. firms, says The Book should sell at least a million copies in the next three years.

Morcover, Klautz states expansively that The Book will leave another, better-known, quasi-medical book, Dr. Kinsey's Sexual Behavior in the Human Female, "trailing in the dust."

• Optimistic—That outlook is sanguine, to say the least; hardboiled book publishers will tell you of many a home medical reference book that has fallen flat, despite the wealthiest backing. But Klautz is going on the results of a prepublication market survey, which showed that one out of three persons interviewed wanted the book.

Also, Klautz may have absorbed some of the enthusiasm that seems to

go with things Texan. Elsevier's U. S. invasion has the unusual twist of picking Houston as headquarters, rather than the more typical publishing centers such as New York, Boston, Chicago.

#### I. Culture & Money

John Klautz chose Houston only after looking over other cities, including Berkeley, Calif., Columbus, Ohio, and Austin, Tex. He wanted no part of New York, didn't want to be the "92nd or 93rd publishing house to settle in New York City," though Elsevier does have a small New York sales office for its trade titles.

• Cultural Center—Houston, indeed the entire Southwest, appealed mightily to Klautz. The area is nursing an industrial boom now. Klautz believes a cultural boom will follow, making Houston the "cultural center of the South." And aside from local and university presses, Klautz feels the region is short on publishers. Already, Elsevier boasts it is the largest book publisher in the Southwest.

Moreover, Houston is expanding its research institutions, hospitals, medical centers, and universities—important for Elsevier's line of technical books (biology, medicine, chemistry especially).

Elsevier hopes to publish fiction, too, and Klautz lights up when he talks about the Southwest's young and enthusiastic literary talent.

• Money Center—Finally—and most important—there's the matter of money. Elsevier of Holland was short of dollars to finance an American operation. There are dollars in Houston, and Klautz found plenty of Houstonians willing to invest in the new company.

As it is now, Elsevier Press is a combination of Dutch publishing knowhow and Texas money. Elsevier, Amsterdam, owns one-third of the company, Texans the rest. Nic Groenevelt, an old-hand Dutch book salesman and former vice-president of the parent firm, is here as general manager and Klautz's deputy. James E. Anderson, vice-president of Anderson, Clayton & Co., is board chairman; several other prominent Texans are on the board.

#### II. Birth of The Book

The Houston setup suits Elsevier fine. It has been trying to get a tochold in the U.S. for years. There was one postwar deal with a New York firm to distribute Elsevier technical books that didn't work out to the company's satisfaction. And it wasn't until 1951, when Elsevier Press set up shop, that the Dutch figured they were here to stay.

Though the firm has come out with

a dozen books by Americans (mainly technical, graduate-level textbooks) the major effort has centered around The Book of Health. As far as Klautz is concerned, it marks the real entry of Elsevier into U. S. publishing.

• Doctors Approve—Years ago, Klautz began planning the health book—readable medical information for the layman, written by doctors on the theory that an informed patient is a better

patient.

Some physicians may debate that point. Indeed, Klautz found he couldn't initiate his book idea in Europe because doctors tended to look on it as another "home treatment" volume. The first doctor-reviewers here, however,

have been favorable.

• Talent Lineup—Klautz found fertile soil for The Book in Houston, and lined up top-flight medical talent to help produce it. Co-editors are R. Lee Clark, Jr., M.D., director of the Anderson Hospital for Cancer Research and Professor of Surgery at the University of Texas, and R. W. Cumley, Ph.D., Director of Publications at the university medical school. Planning involved a book of some 500 pages, to cost \$200,000 to produce. But once the staff got to work and top medical advisers (Drs. Charles Mayo, Alton Ochsner, Alfred Blalock among them) were brought in, the book grew to its present dimensions.

• Printed in Holland—The first 75,000 copies were printed in the Netherlands and bound in New Jersey. Klautz cites two reasons for printing in Holland.

First, if The Book were manufactured in the U.S., with costs on a dollar basis, it would be harder to sell in dollar-short areas. And Klautz has high hepes for sales throughout the world. French and Dutch editions are already on the presses, and German, Swedish, Japanese, Turkish, and Spanish editions are in the works.

Second—and Klautz insists it is a minor reason—is the fact that printing costs are "a little cheaper" in Holland. A look at the elaborate color plates in The Book of Health leads some outsiders to suspect that Klautz is making an understatement. They say color work in The Book would have cost a lot more

in the U.S.

• Printing in U.S.—For the second printing, a set of Dutch plates has come to the U.S. for manufacture.

Elsevier has no intention of sticking strictly to medical tomes or technical books; it's aiming at fiction publishing, too. John Klautz hopes to attract fresh writing talent through a \$1,000 Southwest Literary Award contest. Over-all, Elsevier has plans to publish some 50 books by American authors in the next two years.

#### III. Erasmus & Cookbooks

Elsevier of Holland dates back to 1574. It was founded by Louis Elsevier, who later became official printer to the University of Leyden. By the 17th Century, the house of Elsevier was known throughout Europe—publishing cookbooks, travel volumes, sermons, belle lettres.

During these years Elsevier helped make known the works of Machiavelli, Hobbes, Erasmus, and Hugo Grotius. It also produced the first "pocket books" of the day, inexpensive "duodecimos" to complement the expensive quartos and folios for the rich.

• Downs and Ups—In the 18th Century, business went downhill. Subsequent Elsevier generations didn't have the spark of Louis and his children. In 1830 the firm was sold to an Amsterdam bookseller, Jacob Robbers, who set about revitalizing the firm, made it a joint-stock company, and set up offices in Copenhagen and Stockholm.

Later, in the 19th Century, Elsevier became known for novels and beautifully illustrated books on art and religion. After World War I, fortunes ebbed again, and the firm was reorganized in 1929. The then president, Herman Robbers, hired a young assistant, John Klautz. Two years later, Robbers quit to write a novel, and Klautz took over a company that was then doing a \$500,000 business yearly.

• New Blood-Klautz brought new ideas. He expanded technical publishing by getting hold of the rights on a number of German books, mainly on chemistry. He began working on what is to be Elsevier's monumental technical work—a 63-volume series called the Encyclopedia of Organic Chemistry (No. 12 of the series is due late this year).

Klautz also opened offices in Brussels, Paris, London, and made plans for the U.S. But the war intervened, Elsevier was shut down by the Nazis, and Klautz went into hiding.

• Fresh Start—With V-E Day, Klautz went to work rebuilding. Elseviers Weekly, in content comparable with the New York Sunday Times magazine, was launched—circulation is now at 140,000.

In Holland, the firm publishes a Dutch encyclopedia, special encyclopedias, a raft of technical books, art

books, and some novels.

One of Klautz's great drives is to develop new talent—he has already helped Dutch novelist Jan de Hartog, and artist Joe Spier. Today, Dutch Elsevier, with its holdings abroad and with its printing operations, does a business of some \$15-million yearly, comparable to the largest of U.S. book publishers.



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#### BUSINESS OPPORTUNITIES

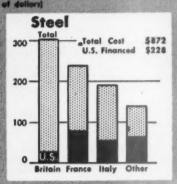
offered or wanted, personnel, financing, equipment, etc., may be found in Business Week's

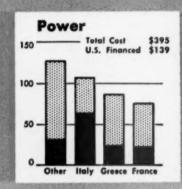
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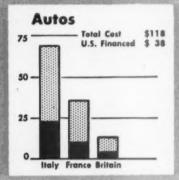
# How U. S. has built up industries abroad:

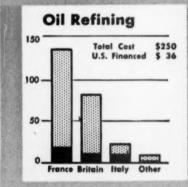
The U.S.'s European aid programs have helped build \$2.6 billion of major industrial projects in 13 countries. Of this, \$587-million was directly financed by the U.S.

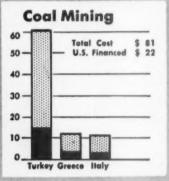
The bulk of this money went to these key industries:











Data: Foreign Operation Administration.

CHISTON WEST

## Trade Aid or Barricade?

The facts in the charts above are going to be a big issue in the coming debate in Washington over trade policy. They are ammunition for both sides as the Eisenhower Administration prepares to grapple with aid, foreign investment, and tariff problems.

It comes down to this:

 Advocates of a liberal foreign economic policy say: "See how we've built up Europe's capacity to buy goods from us." • Critics retort: "See how we've built up Europe's capacity to compete with us as producers"

with us as producers."

• Revival—You often heard this criticism back in the days when the Marshall Plan was getting under way. But for most of the time since aid began under this plan on Apr. 3, 1948, business in the U.S. has been so good that no one worried much about foreign competition. Now the argument is coming up again as competition is



## Perfect Fit for a Filly



Another example of how Carpenter Application Engineering Service is working for industry

The average race track fan rarely gives a thought to the science that goes into pushing a winning horse across the finish line. The truth is that nothing—even down to the fit of a pony's shoes—

is left to chance. And you'd be surprised at some of the problems encountered.

The horseshoe shown here is a good example. The manufacturer was using SAE 1060 steel to make the toe and heel calks. But when the shoe had to be bent cold for an exact fit on the horse's hoofs, the toe calk broke too often because the SAE steel couldn't take the bend.

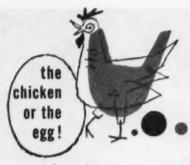
And that's where Carpenter Application Engineering Service went to work. The Carpenter representative demonstrated how Solar (Water-Tough) Tool Steel, engineered by Carpenter some years ago, will bend cold without breaking at a hardness of Rockwell C-58/60. Now, with Solar, not only is the breakage problem solved, but the life of a set of shoes more than doubled—going up from about three weeks to seven weeks!

Time and again manufacturers are finding new ways to make products work better, sell better, cost less... with the help of Carpenter Application Engineering Service. A.E.S. goes to work as soon as you get in touch with your Carpenter Mill-Branch Warehouse or Distributor. Isn't it worth a cry? THE CARPENTER STEEL CO., 140 W. Bern St., Reading, Pa.





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beginning to sting some U.S. industries.

You hear criticism now in both business and political circles. It cropped up recently in Sen. Homer Capehart's business advisory committee on foreign trade policy: John L. Lewis and Treasury Secretary George M. Humphrey agreed that the U.S. should think twice before aiding competitive foreign enterprises.

This revived fear of foreign competition will be mobilized against further financial aid, against lending public money such as Export-Import Bank funds to build up foreign industry, against a lowering of U. S. tariffs.

In the case of tariffs, it's easy to fore-

In the case of tariffs, it's easy to foretell the argument: "We have already paid to build up Europe's industries why should we pay the bill a second time by letting more European goods into our markets at the expense of U. S. producers?"

• The Other Side—Americans who have supported the postwar aid programs and who now advocate a "trade, not aid" policy will have an answer, of course. They'll say—and they include a lot of businessmen—that healthy economies abroad are essential, that we need export markets, that highly developed industrial countries are our best customers.

This group argues that freer tradeincluding freer access to the U.S. market—is as essential now as foreign aid has been. If we hadn't strengthened industries abroad, this group says, there would be no chance at all of removing the barriers that now divide the dollar markets from the nondollar markets.

• On Balance—There's no telling yet how Clarence Randall's Joint Committee on Foreign Economic Policy will weigh these arguments, or how Congress and the Administration will react to the committee's recommendations. But at least the Randall committee is equipped with the statistics of foreign aid from April, 1948, through May 31, 1953. These figures were compiled during the summer by the Foreign Operations Administration.

• Billions and Millions—FOA's summary shows where \$14.5-billion in European aid was spent:

 Raw materials and semifinished products took \$4.4-billion.

Food, feed, and fertilizer took

\$3.6-billion.

- Fuel cost \$1.9-billion.
- Cotton took \$1.7-billion.
- About \$1.4-billion went for industrial machinery and equipment. Of this, about \$800-million covered reconstruction and modernization projects that needed less than \$1-million apiece for U. S. equipment. Total aid for projects requiring more than \$1-million each came to \$587-million. Those are the projects shown in the chart (page 166).

#### BUSINESS ABROAD BRIEFS



European unity: The first European passport is now being used by personnel of the Schuman coal-steel pool for travel between the six member nations—Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany. In the picture a French customs official gives one of them his O.K.

American Independent Oil Co.'s third oil well in the Kuwait-Saudi Arabia neutral zone is now ready to start producing about 3,000 bbl. a day. Independent drilled its first well in the area in April (BW-Apr.25'53,p165); its second in August, but won't start big production till a pipeline to the Persian Gulf is completed. It says work on the line is now "well advanced," that a fourth well will be drilled soon.

U.S. firms in Japan: A new plant on Kyushu Island, jointly owned by Dow Chemical International, Ltd., and Asashi Chemical Industry Co., Ltd., will start producing polymer plastics next week. . . . Merck (North America) Inc., contracted with Banyu Chemical Co. Ltd., Tokyo, to distribute two of its hormone products.

Commercial exports from the U.S. were 13% lower in value for the first seven months of 1953 than they were for the same period last year, according to the Commerce Dept. But free military aid shipments of \$2.4-billion brought total exports up to \$9.4-billion, 4% higher than last year.

Air France will offer direct, no-change service between Chicago and Paris and Frankfurt starting Oct. 21. Two Super Constellations will leave Chicago Midway Airport each week. They'll refuel at Montreal, continue to Frankfurt after discharging passengers at Paris.

# Cheaper Cars for Britain

New Ford model sets low-price mark, while Jaguar announces cuts; Austin bids for speed . . . U. S. overseas advertising grows . . . Nedick's expands in Mexico City.

British auto firms have been making news lately. This week English Ford introduced a "people's" model that's the cheapest on the British market; last week Jaguar cut prices on its sports cars by as much as \$889; and the week before a modified version of Austin's new sports car, the Austin-Healey, sped over a mile at 142 mph., topping (by some 11 mph.) the accepted stock car record held by Jaguar.

As far as the British public is concerned the Ford development is the most important, but the Jaguar price cuts and the Austin speed records are big news to the growing U.S. fraternity of sports car aficionados.

• Lowest—Ford's new Popular 1954 is a small, no-frills, four-cylinder, economy car that will sell for about \$1,100, including the British purchase tax. It's to replace the outdated Anglia, previously the cheapest British car at \$1,-240. That car will be scrapped.

The new car is the result of a threeyear, \$34-million retooling program at Ford's Dagenham plant. It's also an answer to Standard Motor Co., which entered the low-priced field a couple of weeks ago with a \$1,340 model. And it could mean the beginning of a hot fight between Ford, Austin, and Standard, of Britain; Fiat, of Italy; Renault and Citroen, of France; and Germany's Volkswagen for the European baby car market (BW-Sep.19'53,p164).

• Sleek Speed—There's already a heavy contest on among British auto makers for the U.S. market. But here it's sleek and speedy sports cars that get the big play. Austin, Rootes and English Ford do sell economy models here, but they lag behind sports cars like the Jaguar and the MG in sales.

Both these cars have been doing better all the time. That's why Jaguar says it's been able to make the biggest price reductions on the U.S. market since World War II. All its sports car prices have been lowered, with cuts ranging from \$889 on the modified XK-120 (new price: \$3,545) to \$190 on the hard-top coupe.

Jaguar says the cuts are due solely to high sales and production, but some dealers figure the Austin-Healey was a contributing factor. That car, priced at \$2,985, has been selling fast since it hit the market in July. And the speed records it set in Utah (as yet not officially accepted) have brought it a lot of attention. Actually there's plenty of room for both the Jaguar and the

Austin-Healey and for the MG, too, at different price levels, with the Austin-Healey selling at a price about halfway between the other two.

#### **Export Advertising**

International Advertising Comes of Age—that's the label the Export Advertising Assn. of New York puts on a survey prepared for it by Dun & Bradstreet, Inc. It's a pretty apt title: The survey finds that by the end of the year U.S. firms will have spent an estimated \$77-million for overseas advertising of export goods. And foreign branches and subsidiaries of U.S. companies will have spent at least \$85-million, maybe as much as \$170-million.

The report also breaks down overseas advertising by industries and by the media they use. Drug companies do the most advertising abroad, followed by automobile and truck manufacturers. Most popular media for export advertising are sales promotion and point-of-purchase materials. Next come foreign newspapers, followed by U. S. trade and consumer magazines and radio.

#### Orange Drink to Mexico

Almost before you can say Salchichas Especiales Nedicks (that's Spanish for Nedick's special hot dogs) the familiar orange of the Nedick's lunch counter has blossomed in Mexico. During the past seven months, Nedick's, Inc., New York, has opened three shops in Mexico City, and has taken leases on sites for numbers four and five.

They're just like the New York shops, though the fresh fruit orange drink shares billing with local staples like tacos and frijoles. Nedick's plans on building a quick string of shops: "We like to move fast," explains a company executive, "and the only thing holding us up is lack of manpower."

Nedick's Mexican operation (actually it's a subsidiary of National Phoenix Industries, Inc., Nedick's parent organization) was set up just last year. It's one of the few U.S. food and restaurant chains ever to take a crack at the Mexican market. Walgreen Co. controls the Sanborn drug and restaurant chain there, and is expanding slowly but surely (BW-Aug.l'53,p76). Several other attempts by U.S. restaurant entrepreneurs haven't panned out so well.





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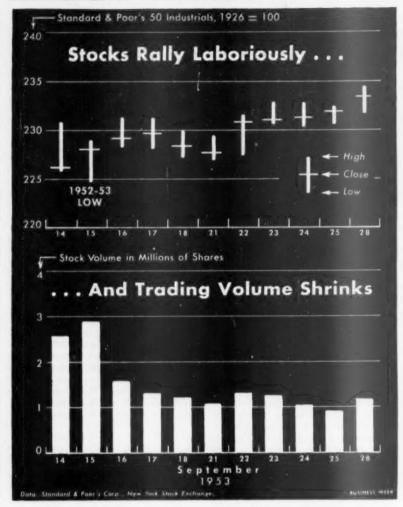
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# MARKETS



# Does the Rally Mean?

Chart readers still put a bearish twist on the performance of the stock market-even though shares inched upward six consecutive trading sessions in a row.

They point out that with each labored rise, volume has declined (chart). This, they say, indicates that bullish sentiment is still not strong enough to persuade investors that-after last month's sharp break-a sound base has been established for a sustained up-

· A Rise Is a Rise-The bulls, on the other hand, are taking a lot of comfort from the indisputable fact that the market has been going up. They interpret the advance much as did an apocryphal Wall Street news reporter who, reporting a market rise, said:

"There were more buvers than

That, apparently, is just about what happened in stocks these last few days. The aggressiveness of sellers shrank. And the buyers, including a number of mutual funds, began picking up shares after the sharp drop three weeks ago.

A rise on Tuesday of this week was the sixth consecutive daily advance to be recorded by the Standard & Poor's 50 industrials index.

· Selective-It was a selective rise, however. While 479 of the issues traded closed on higher ground, 371 were

The reasons for the rally, laborious though it was, were fairly clear:

· Stocks had been tilting downward since early January. So many issues looked increasingly "cheap."

· Stock yields-as a result of the long price decline-are up. The average vield on the S&P 50 industrials currently is around 6.24%, compared with 5.46% early this year.

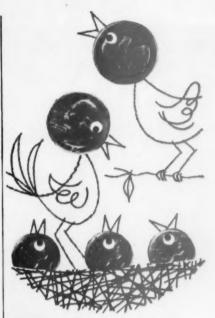
 Dividend rates generally are as good as or better than at the start of the year. Earnings as a rule are continuing at levels that warrant keeping common declarations close to present rates.

 Bond prices are up, decreasing bond yields. Among the high-grades, the long-term Treasury 30-year 34s have risen to beyond \$1,020 per \$1,000 bond, and easier money rates on future U.S. issues now are predicted. The result of the rise in bond prices—with the accompanying reduction in yields—has widened the income differential in stocks' favor; this reverses the 1952 trend.

#### Most Preferreds Still Lagging Behind 1952

				ice Range	Recent	1053 Gains	
	Preferred Stock Issue	Close	High	Low	Level	Maximum	Now
	Reduction \$4.50		\$114.75	\$101.25	\$101.87	0.2%	-11.0%
	nerican Airlines \$3.50	79.75	84.50	74.50	73.00	6.0	- 9.2
An	erican Bank Note \$3	57,50	59.00	50.00	57.75	2.6	+ 0.4
An	erican Can \$1.75	44.00	44.37	40.12	43.25	0.8	- 1.7
An	er. Radiator & Stand. San. \$7	172.00	171.62	148.00	*165.00	-0.2	- 4.1
	erican Smelting & Ref. \$7	159.00	159,25	136.00	*139.00	0.2	-12.6
An	erican Snuff \$6	125.00	127.00	120.00	123,50	1.6	- 1.2
An	erican Woolen \$7	84.00	88.25	60.00	71.75	5.1	-14.6
	ch., Topeka & Santa Pe \$2.50	56.00	57.12	50.25	52.25	2.0	- 6.7
	antic Refining \$3.75	97.50	99.00	89.75	91.62	1.5	- 6.0
Bo	rg-Warner \$3.50	93.50	94.50	86.37	*92.00	1.1	- 1.6
Bri	stol-Myers \$3.75	97.00	99.37	91.00	*92.00	2.4	- 5.2
Bro	ooklyn Union Gas \$2	51.50	54.00	45.50	*47.50	4.9	- 7.8
	rlington Mills \$3,50	81.00	78.00	67.00	*65.50	-3.7	-19.1 -19.1
	. Case \$7	143.75	143.00	119.00	*116.25	-0.5	
	terpillar Tractor \$4.20	194.75	105.00	96,50	*101.00	0.2	- 3.6
Cel	anese Corp. \$7	133.50	133,50	116.00	116.00	0.0	-13.1
Ch	esapeake & Ohio \$3.50	88.00	85.37	80.00	*83.00	-3.0	- 5.7
Cle	veland Elec. Illum. \$4.50	101.50	102.00	91.50	94.75	0.5	-6.7 $-2.4$
		108.12	109.50	100.00	105.50	1.3	
	nsolidated Edison (N. Y.) \$5	108.87	109.50	103.25	106.50	0.6	- 2.2
Co	nsol. G., El. L. & Pow. Balt. \$4.50.	111.00	110.50	100.00	102.00	-0.5	- 8.1
	nsumers Power \$4.50	109.50	109.37	99.00	102.75	-0.1	- 6.2
	ntinental Can \$3.75	97.75 172.00	97.37 172.00	87.00 161.00	*89.50 *168.00	0.0	-8.4 $-2.3$
Cra	ne Co. \$3.75	95.50	95.00	87.50	88.50	-0.5	- 7.3
	own Zellerbach \$4.20	102.25	103.00	91.00	*95 25	0.7	- 6.4
	ere & Co. \$1.40	33.87 103.37	33.87 102.75	28.75 94.50	30.50 100.62	0.0	-10.0 $-2.7$
	I. du Pont de Nemours \$3.50	96.00	97.00	89.75	*92.12	1.0	- 4.0
		47.50	48.00	42.00	*44.38	1.1	- 6,6
	quesne Light \$1.87	96.00	96.75	89.00	88.00	0.8	- 8.3
Ge	neral Foods \$3.50	94.25	94.75	88.50	*91.50	0.5	- 2.9
Ge	neral Mills \$5	123.50	124.50	113.50	116.00	0.8	- 6.1
Ge	neral Motors \$5	123.75	123.50	112.50	118.75	-0.2	- 4.0
	oker Electrochemical \$4.25	102.00	102.00	90.00	*93.25	0.0	- 8.6
	usehld Finance \$3.75	90.62	93.50	80.50	87.00	3.2	- 4.0
Ins	gersoll-Rand \$6	161.75	161.25	151.00	*156.00	-0.3	- 3.6
Int	ernational Harvester \$7	165.00	166.25	148.50	155.00	0.8	- 6.1
	vell Tea \$3.75	99.00	101.00	88.62	*94.50	2.0	- 4.5
	ppers Co. \$4	92.75	93.50	85.00	85.50	0.8	- 7.8
	y Department Stores \$3.75	94.00	95.00	83.50	*89.00	1.1	- 5.3
Me	erck & Co. \$3.50	92.50	87.25	80.00	*83.25	-5.7	-10.0
Na	tional Biscuit \$7	173.50	173.25	158.75	168.00	-0.1	- 3.2
Na	tional Distillers \$4.25	99.00	99.50	87.25	89.00	0.5	-10.1
Na	tional Lead \$7	172.00	172.00	155.25	*162.50	0.0	- 5.5
	agara Mohawk Power \$3.90	94.00	93.67	87.00	*88.00	-0.4	- 6.4
	ver Corp. \$4.50	94.00	95.25	73.87	73.00	1.3	-22.3
	iladelphia Elec. \$3.80	98.50	99.30	86.00	*91.25	0.5	- 7.4
Pu	blio Service Elec. & Gas \$4.08	101.00	102.00	92.00	95.62	1.0	- 5.3
	mington Rand \$4.50	98.25	97.00	87.00	*86.12	-1.3	-12.3
Ro	hm & Haas \$4	100.00	100.00	92.00	95.00	0.0	- 5.0
Sec	ott Paper \$3.40	92.75	91.50	85.62	*86.00	-1.3	- 7.3
Sta	indard Oil (Ohio) \$3.75	100.00	100.50	94.00	*94.12	0.5	- 5.9
Th	ompson Products \$4	97.50	97.50	88.75	90.00	0.0	- 7.7
	ion Electric \$3.70	98.00	97.00	82.12	*84.00	-1.0	-14.3
Un	ion Pacific \$2	50.00	50.25	44.25	*45.50	0.5	- 9.0
W 2	S. Gypsum \$7	173.00	175.00	159.00	*165.00	1.2	- 4.6
U.							
Vir	ginia-Carolina Chemical \$6 stinghouse Elec. \$3.80	130.00	130.25 99.75	114.50 91.12	113.00 *94.75	0.2	-13.1 $-4.8$





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OUSTED by AFL, Joseph Ryan (left) leads longshoremen from convention hall, vowing a fight.



REBORN Charter members of new union free from racketeering taint confidently predict victory.



ON THE DOCKS organization is started by new International Longshoremen's Assn. (AFL) as police stand by.

# **AFL Plays for High Stakes**

The American Federation of Labor this week shifted its attention from a crowded, busy convention hall in St. Louis to New York's waterfront. There, in the shadows of the country's busiest docks, quick and explosive developments followed what was perhaps the most critical business of AFL's meet-

ings: the expulsion of the racket-ridden International Longshoremen's Assn.

The federation ousted ILA by a topheavy vote for failing to end "racketeering, gangsterism, crime, and corruption" within its ranks (BW-Sep.26'53, p174). It subsequently set up a new "clean" longshoring union—using the same name, the International Longshoremen's Assn. (AFL)—with about 10,000 members to start with. And it pledged all-out support for the new ILA in the inevitable fight against the old, ousted ILA.

That fight started this week. It threatens to be a violent one before it's

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over. There is little possibility that it will be ended without serious and per-

haps long-lasting impact.

• Vital for AFL—The New York struggle of the two rival longshoring unions cannot be considered apart from AFL itself. The federation and the ILA (AFL) are, at this point, synonymous. In fighting for the creation of an untainted, aggressive longshoring union, AFL has its sights on something bigger: a solid-cored, responsible AFL internal structure able to meet "standards of good citizenship and sound trade unionism."

That is a prime objective of AFL's new president, George Meany. The reason is obvious: The bargaining and organizing advantages labor has had over the last decade will be reduced, perhaps lost, if there is a marked change in economic climate. If AFL is to continue high in prestige and to maintain the steady growth of recent years, then it must prove itself responsible.

That means the federation must prove it is determined that it no longer "will lend the cloak of trade unionism to organized lawlessness or . . . dignify with its affiliation persons and practices alien and inimical to our movement"—in AFL's own words. It recognizes that any failure to take a firm, fighting stand against the racket-ridden old ILA might "cast doubt and suspicion on our movement as a whole."

Consequently—though the brunt will fall on the new ILA, Dave Beck's AFL teamsters, and the federation's seafarers' union in the battle against the old longshoring union—the entire weight of the federation, with 10.3-million members, will be against the ousted union, which last reported 60,000 members.

• AFL-CIO Unity—The New York

 AFL-CIO Unity—The New York waterfront problem was the most dramatic issue to curve before the convention, but it was by no means the only one. Another significant action was the unanimous ratification given an AFL-CIO no-raiding agreement in the closing hours of the St. Louis meetings.

The importance of this agreement cannot be minimized—if it means in reality what it says on paper. If strife between the two union organizations is reduced substantially, and a peaceful means of settling their jurisdictional disputes is found, then count organic unity as inevitable—perhaps at 1954 conventions of the two labor bodies.

AFL's executive council pointed out to delegates the importance of the noraiding pact, calling it "the first and indispensable step toward the achievement of organic unity." Obviously, it is. For the machinery for settling jurisdictional disputes between AFL and CIO unions, leading to arbitration, could very simply be extended to cover settling the greater jurisdictional disputes involved in a merger of unions.

One leader, reading the text of the AFL-CIO agreement, commented bluntly: "This isn't just a step toward unity; it is an undeclared unity—if it works."

• Wary-That "if it works" is a proviso a lot of unionists are making. The no-raiding pact didn't draw an opposing vote at AFL's convention, and its approval brought enthusiastic applause. However, Dave Beck's teamsters (now about 9% of AFL's total membership) and a number of important unions in metal-trades and building-trades departments of AFL are wary of it.

They contend that it might "immobilize or freeze workers in one union (obviously in CIO) even though they belong, properly, to the jurisdiction of

another.

Beck said flatly in St. Louis that he approves of the pact "in principle" but added that the teamsters want to analyze it carefully before accepting it—because, he complains, "Mr. Potofsky's organization in the CIO (the Amalgamated Clothing Workers) has New York laundry drivers as members. Hundreds and thousands of our drivers in Detroit and elsewhere . . . are in the dual organization." The reference to "dual organization" is significant; with unity in mind, other leaders in AFL aren't using the term—but Beck still is. If Beck's teamsters and some of the

key craft unions—such as the carpenters (with 820,000 members) and the smaller but important pattern-makers—stay out of the no-raiding pact, it might fall flat.

• The Administration—In the national setup, AFL no longer seems to have any doubt about policy toward the Eisenhower Administration—a pre-convention problem. The unpleasantness about the resignation of former Secretary of Labor Martin Durkin—not relieved by Vice-President Richard Nix-

on's speech before AFL-settled that. To AFL, Durkin's story that the President broke his word on a message recommending Taft-Hartley changes is the truth; the defense that it was all a "misunderstanding" and that the message is still to be completed, and submitted to Congress (page 34), is considered completely untrue.

Under the circumstances, you can expect a step-up of AFL criticism of the present government in Washington-nót only of Congress but also of the President, who has been relatively free from labor attack up to now.

• The Future—AFL considers its own future as bright. Its new leadership, under Meany, proved capable, farseeing, and popular. Internal problems now seem on a way to successful solution, with the referral to the executive council of authority to set up a jurisdictional-disputes procedure to end internecine feuding. And there is undeniable organizing vigor.

To some traditionalists in the federation, Beck is an enigma and problem to be faced sometime in the future. Some top members of the executive council attended a banquet for Beck as guests of St. Louis teamsters. The teamsters' chief made a blunt-worded speech, without nuances. Putting everything on the line in order, he said, that "there may be no misunderstanding of the policies that we intend to follow and the definite character we will develop" in the teamsters union. He stepped on some toes, and there was notable coolness in the way some of the older AFL officials received Beck's words.

Eventually, the Beck problem might worry AFL considerably. It doesn't, now. To the federation, he may be unorthodox according to AFL traditions, and frightening and dangerous for his conviction that he is right and that his ends justify the means toward them—but at the same time colleagues m AFL consider Beck an asset, a dynamic force at a time when the federation needs forcefulness and challenge all along its leadership lines.

#### In Alabama You Get A Choice of Labor Laws

It all depends on which labor law you read. That's true, at least for Alabama after the state legislature passed a second law restricting union membership just two weeks after it adopted one aimed at outlawing the union shop.

The first law—a "right to work" statute—declares an individual's right to a job cannot be denied or abridged because of membership or nonmembership in a union (BW—Sep.5'53,p148).

Then, two weeks later, the legislature passed a second bill much more vigorously opposed by unions. This takes away civil-service rights of most state employees who join "or participate in" a labor union or labor organization of any kind. But there is a gimmick in it that is giving unionists a ray of hope for their union-shop contracts.

The first "right to work" measure protected union members—including public employees—against any abridg-

ment of their job rights.

The second measure apparently called for such an abridgment of state employees' normal job rights, and also provided (in the usual statutory manner) that any laws or parts of laws contrary to it are void.

Labor attorneys say this nullifies the "right to work" law because there is an obvious conflict. Advocates of the second law say it doesn't, because the law applies solely to state employees. Eventually, the courts will have to decide who is right.



ROGER D. LAPHAM founded the San Francisco Employers Council in 1939.



WILLIAM G. STORIE heads it now-under an entirely different set of rules.

# Employers' Group in Flux

The old San Francisco group tried to handle both policy-making and collective bargaining—with unhappy results. Now there are two groups, one for bargaining.

The risks and advantages of collective action by employers have provided a meaty bone of contention for a good many years. To current discussions of multiple-employer bargaining, organized employers in San Francisco have just contributed another raft of pros and cons.

After 14 years as a tower of strength in an area of robust unionism, the San Francisco Employers Council (BW—Oct.26'40,p39) has undergone drastic reorganization. Early this year it was dissolved—and then reestablished at the same address and under much the same management—that of William G. Storie, one of the top executives of the old council.

A second organization was created while this was going on—the Federated Employers of San Francisco. This is headed by Alexander R. Heron—a Crown Zellerbach Co. executive—as president, and Frank P. Foisie as executive vice-president.

• Split—Immediate purpose of the shuffle was to divorce collective bargaining from policy-making. This purpose has been achieved.

The new council amounts to a professional, nonprofit, collective bargaining agency. It negotiates and administers union agreements for its 800 or more members—individual employers and 15 employer associations.

The Federated Employers, on the other hand, provides just about every personnel management service to its 400 or so members—except bargaining. These include research, legislative representation, public relations.

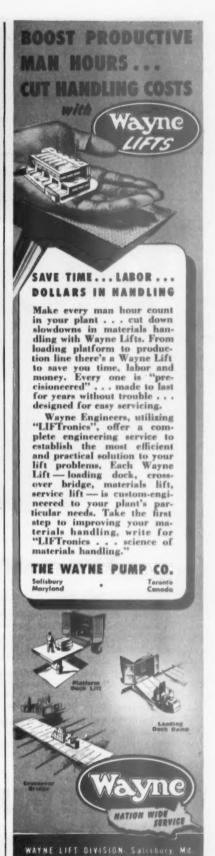
• Trouble—The former council's experienced staff had negotiated more than 2,000 labor contracts in 14 years. The record was marred by a few failures ending in strikes (BW—Oct.18'47, p196). Far from being a labor-baiting, union-fighting outfit, the council made a contribution to labor peace.

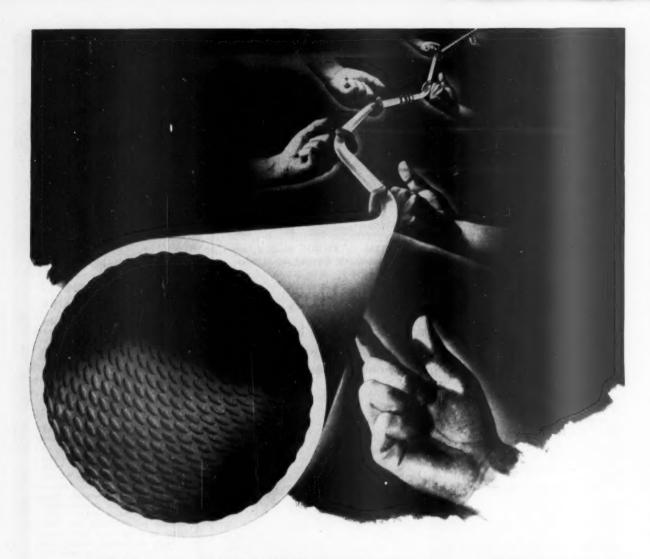
But the council didn't negotiate all the labor contracts in San Francisconor even the contracts of all the council's members. Big employers and big employer associations negotiated their own. Sometimes they found themselves in competition with the council's negotiators, whipsawed by union bargainers, who pushed them into meeting standards set in other negotiations by the very council to which they belonged. Embarrassing as this was to employers in both categories, the worst result was that it killed the chances for any semblance of citywide employer-labor policy.

With the negotiating function left in the council, Heron intends to make the federation the crucible of employer relier.

• Two Hands—There is some duplication of membership, not much. The new council holds a membership in the federation, thus has access to all the research and other services when it goes into a bargaining session. Also, a few employer associations have retained council membership to qualify for collective bargaining service, but have also joined the federation to qualify for direct use of the facilities.

On the surface this could look like a mere hat-switching trick. It isn't





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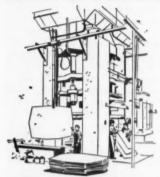
REPUBLIC STEEL



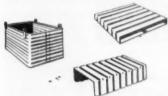
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though. The reorganization has produced some strong feeling among employers, and in both camps can be found members who doubt the wisdom of the move. Small employers within the council, for one example, have the uncomfortable feeling that big business has taken a runout powder from its community responsibilities.

· Finances-It was no secret that the old council was financially anemic. To keep it going, leading business firms were tapped repeatedly for contributions to a so-called sustaining fund. This was conceived as a kind of rainy-

day reserve for emergencies.

But anemia of the membership dues fund became a chronic emergency, and the big companies found themselves subsidizing it. Whatever satisfaction they derived from helping to mold a united front of employers was dissipated by the knowledge that their dollars were helping to complicate their private business problems. Now that such firms as Pacific Gas & Electric; the phone company; Standard Oil; California Packing; Southern Pacific; and Crown Zellerbach have pulled out, the council's budget has been trimmed from \$260,000 a year to \$100,000.

On the other side of the fence, there are employers who feel they didn't get a fair shake in the assessments by which the new federation is raising its budget to \$125,000 a year. Foisie says the rule of thumb for dues assessment is roughly

\$1 per employee.

These examples don't necessarily indicate a ruction among employers. They show only that employers are far from unanimous in their opinion of the splitup.

· Old Days-San Francisco has a long tradition of joint action by employers. Not all of it was so well-meaning as the employers' council that emerged from the ferment and turmoil of the

middle 1930s.

Back at the turn of the century, the Employers Assn. of San Francisco was in business to crush unions. Its methods stirred up so much violence that public opinion was revolted. The unions, though licked on the economic front, went on to consolidate their public relations triumph in political pastures. They elected a mayor and made San Francisco a politically sheltered citadel of the closed shop.

Out of the remnants of some other associations of similar hue, the Industrial Assn. was set up around 1922 to launch the "American Plan," a cuphe-mism for the open shop. Through much of its life the Industrial Assn. was as hostile to unionism as its predecessors. Among other things, it smashed the closed shop. But the emergence of a new charter for organized labor in the early 1930s tended to blunt the association's attacks.

Among some of the members grew suspicion that unions were here to stay and employers had better learn to live with them. This was the premise on which Roger D. Lapham (picture), then a prominent shipping executive and later mayor, set up the San Francisco Employers Council in 1939. For its membership it drew from precisely the same pool that peopled the Industrial Assn., but it set for itself the positive objective of living with unions.

· Objectives-The language of the council's charter seems to have been a careful piece of draftsmanship, though in the exhilaration of crossing the threshold to an era of labor peace not many took it too literally. As the years wore on, the council found itself responding to the urgent needs of the moment rather than steering a rigid course down the middle of the charter objectives. As one of the officials remarked: "When a fire starts, the first thing you do is put it out."

Among the objectives in the coun-

cil's charter were:

· To bring employers, and groups of employers, together in matters affecting employee relations. Out of these meetings of minds, it was felt, would emerge a positive, uniform labor

• To help employers gather into autonomous industry groups for labor

relations purposes.

· To assist members in contract uegotiations when asked.

· Unrealistic-Ideally, that was a sound approach. But it failed to take into account a few realities of life.

Actual bargaining for members was an extension of service that the charter didn't contemplate. But in the flush of satisfaction with the staff's fire-fighting skill, the council didn't hesitate to provide the service. It was not until recent years that complaints about the pinch of bargaining competition began

to pile up.

One example of this was in the warehouse industry. The dominant group of warehouses in the San Francisco area is organized as the Distributors Assn. of Northern California. It was a member of the old council but did its own bargaining with Warehouse Local 6 of Harry Bridges' longshore union, then a CIO affiliate. Other warehouses whose employees were members of the AFL Teamsters' warehouse local delegated their bargaining to the employers' council. Each union seized every opportunity to press for advantages that the other didn't get. Employers in both groups were caught in the cross fire. The same conflict arose between employers and employers' groups in dissimilar industries that happened to bargain with a common union. Concessions granted by an association bargaining for itself rose to smite the



# We helped take the MISS out of GUIDED MISSILES

the problem: The electronic brain which guides a guided missile is delicate and complicated. One of the major problems, which faced missile engineers was how to protect this sensitive mechanism from the violent shock and vibration set up at take-off and in flight.

the solution: Since conventional types of shock-mountings proved to be inadequate, Robinson engineers were called in to find a solution. After careful study and intensive laboratory work, Robinson developed a special multi-directional mounting that reduced vibration and shock to such a marked degree that the missile's guidance system was free-floating and thus dependable. Today, these mountings are in quantity production at the Robinson factories ... and reliability now rides the rockets!

### Do you have a problem in Vibration Control?

This same engineering know-how and skill can be put to work on your vibration-control problem . . . whether it involves precision instruments, electronic or television equipment, aircraft, motor vehicles, home appliances, or machinery of any size or weight.

Unlike old fashioned rubber mountings, Robinson Met-L-Flex\* mountings are impervious to age, oil, bacteria, water, dust, dirt, or temperature extremes. They are inherently damped, and they do not pack down or wear out.

A letter or telegram will bring a Robinson engineer to analyse your particular problem and suggest a solution. Write or wire us immediately. Dept. BW3.

 Met-L-Flex is the copyrighted designation for the all-metal resilient cushions developed and pieneered by Robinson.

ROBINSON AVIATION INC.

council's negotiators when they faced the same union.

 New Approach—One result was that some associations peevishly withdrew from the employers' council. And with each withdrawal, the council found itself speaking for a smaller segment of the business community.

A couple of years ago the San Francisco business leaders who, in effect, had bankrolled the council decided to take a second look to see if they were defeating their purpose. This year's reorganization was the result of that sur-

What the business leaders found was that the council had swerved from the charter objectives. Instead of assisting in labor negotiations when asked, the council was doing the actual negotiating. It was fostering the formation of new industry associations and the growth of the old ones, but it was also alienating groups that did their own bargaining. These groups were resigning from the council. Instead of uniting employers toward a common labor policy, it was splitting them.

One solution that was offered and rejected was to hold the old council together but to shuck off all active bargaining functions. This would have left each employer or association the responsibility for its own actions at the bargaining table.

• Future—It's too early to say whether the present divorce will turn the tide. Close adherents of the new employers' council, as well as some elements within the federation, regard the split as a fundamental mistake.

There is a persistent tendency among small employers to indict big business for penny-pinching. And so far, there is no indication that the reorganization has curbed bargaining competition.

Management of the Federated Employers, to the extent that it acknowledges the existence of any unhappiness in employer ranks, regards it as transitory. Foisic argues that the existence of bargaining competition under one roof made impossible an agreement on policy matters. Now he feels that the federation, aloof from the firing line, is in a position to bring conflicting elements together.

The Pictures – Cal-Pictures—175; Eastern Publishers Service—116; Harris & Ewing—34 (rt.); I.N.P. —82, 168, 172 (bot.); Bob Isear— 138, 139; Herb Kratovil—Cover, 30, 31, 126, 127, 128, 129, 138, 139; MPO Productions, Inc.—66, 67; Edith Miller—164; Maurice Miller—96, 97; United Press—88, 122, 158, 172 (top).

#### LABOR BRIEFS

AFL preference for the Secretary of Labor job vacated by Martin Durkin appears to be a dark-horse possibility, Charles Taft—an Ohio Republican with more liberal views than his brother, the late Sen. Robert A. Taft. Although never officially mentioned by AFL, Charles Taft's name was heard frequently in convention hall corridor discussions as "acceptable" to labor.

Peace pact worked out by the International Assn. of Machinists and International Assn. of Bridge, Structural & Ornamental Iron Workers (both AFL) ends a long jurisdictional feud. The iron workers will erect machinery under the agreement, the machinists will do the rigging. IAM has also worked out a peace plan with AFL's Carpenters, will shortly confer with AFL's Operating Engineers on another long-standing jurisdictional disagreement.

An NLRB election covering three plants of Westinghouse Electric Corp.'s Meter Division in Newark last week upheld the recent shift of 2,600 workers from left-wing United Electrical Workers to International Union of Electrical Workers (CIO). UE lost its bid to recapture the workers (BW-Scp.12'53,p173) by a 1,360-981 vote.

A no-union victor in an NLRB poll covering employees of Robbins Tire & Rubber Co., and Robbins Flour Products Co., both in Tuscumbia, Ala., has caused speculation in Alabama. In the first vote since the state's new right-towork law went into effect, 470 employees voted against unionization, 71 for CIO, and 6 for AFL. A union spokesman said the "disappointing" results reflect the impact of the tightened labor law.

Reversal by the U.S. Circuit Court of Appeals in the Anthony Valenti case (BW-Nov.22'52,p178) has freed the former local business agent of the United Packinghouse Workers (CIO) in Camden, N. J., from a 5-year jail term under a conviction for falsifying a non-Communist oath. Although the reversal was on a technicality, UPW now is considering a demand that NLRB restore five certifications revoked as a result of the Valenti conviction (BW-Nov.29'52,p115).

Convention of the United Electrical Workers in Chicago last week reelected Albert Fitzgerald, president; Julius Emspak, secretary-treasurer; and James Matles, organizing director. UE now claims 1,039 contracts covering 316,150 workers (not all members of UE).



Lion's New \$31,000,000 Petro-Chemicals Plant now under construction near New Orleans provides an answer . . . MORE MIRACLE-WORKING NITROGEN FERTILIZER to make every grable acre produce more.

Three-hundred and eighty-five thousand extra mouths to feed every week . . . that's the rate at which the world's population is increasing. And that's why the world's arable farm land must produce more and more. To help do this, Lion Oil Company . . . already producing 10% of the nation's miracle-working synthetic nitrogen fertilizer materials . . . is building another new petro-chemical plant. Located near New Orleans, these new

facilities will increase Lion's nitrogen production by 53%.

This is typical of Lion's long-range growth program. To meet growing demands for higher octane gasolines, Lion is adding multi-million dollar units to its refinery at El Dorado, Arkansas. In Snyder, Texas, at the Lion-operated and partly owned Diamond M-Sharon Ridge gasoline plant, facilities and output have been expanded. And Lion is becoming more

and more active in the nation's search for crude oil and gas. Those are a few of the many reasons why Lion looks forward to an ever brighter future.



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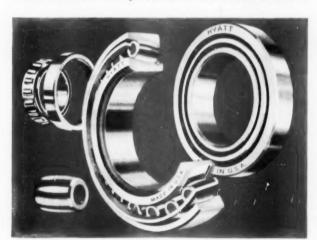
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The Barrel name comes from the barrel shape of the rollers ... but its superiority in bearing applications comes from dual-purpose design and self-aligning ability! This unique bearing takes load from any direction . . . and operates at full load-carrying capacity under conditions of misalignment! And in addition, the barrel shape of the rollers combines the low rolling friction of a ball with the high load capacity of a cylindrical roller—so that the Barrel Bearing is ideal for a wide range of applications.

Expensive? Not at all! Advanced manufacturing processes—plus the facilities of one of the newest and finest bearing plants in the world—make the initial cost far lower than you would expect!... For full information on this newest solution to the friction problem, write to the address below.





Self-aligning action makes the Barrel Bearing ideal for tractors and farm implements. Over many years, its durable, dependable performance has been established in a wide range of these applications.



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She'll never see the "CASCO-LOID" label shown at the right, but this Borden product has a lot to do with her success as a painter. Used in making high grade latex paints, CASCOLOID casein dispersion provides stability for long shelf life. It improves the flowing and levelling properties to cover up roller or brush marks. It provides good "wet lap" so that wet

paint will blend with partially dry areas. It improves water-resistance and washability of the finished, painted surface.

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If you have problems in compounding materials of this type, our casein chemists may be able to help you. Address: The Borden Company, Chemical Division, Dept. BW-103, 350 Madison Ave., New York 17, N. Y. 3.4

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# PERSONAL BUSINESS

BUSINESS WEEK OCT. 3, 1953



A key man in the personal affairs of any executive should be his lawyer. Yet many top businessmen either don't have a lawyer on a regular basis at all, or they fail to make adequate use of his services.

Either practice is more than foolish—it can be downright dangerous. Properly used, a good lawyer can keep you free of entanglements that might not only cost you money, but that can even change the course of your life. And the fees will likely run less than you might expect.

People tend to avoid going to a lawyer until they are already deep in trouble. By then, it's often too late to get them out with any real success. They blame the lawyer—and resent the bill he sends.

These people—like most others—fail to recognize that the law is one of the most complex of all human institutions. Dealing with it is not an exact science; if it were, there would be no need for judges, much less for lawyers.

This means that the time to see your lawyer is before you get into trouble. Get in the habit of asking his advice even on things you might consider of minor legal importance. For in spite of the jokes about it, the "fine print" can tie your hands tight before you know what's happened.

Being aware of this, you will realize that there is a broad variety of documents that your lawyer might well read before you sign. Among them are such things as employment agreements, leases, agreements to buy or sell real property, partnership agreements, and insurance contracts.

One thing you can be sure of: Your lawyer will draw up all papers in your favor. That fact may be neatly concealed beneath a flood of legal jargon that you can't understand.

A lawyer can tell you exactly what's involved. That will prevent future disagreements, and perhaps expensive hazardous litigation. His fee will be modest—and worth paying for learning exactly what you're getting into.

Should you pay a lawyer a "retainer"—that is, give him a flat sum in advance, whether or not he renders any service?

In general, the answer is: definitely not. Pay your lawyer for the particular case, much as you do your doctor.

(A retainer is usually paid by a corporation to secure the services of a particular lawyer so that he will not represent an opponent or competitor. Also, it is generally applied against a specified type of service to be rendered to the company over a given period of time.)

You can draw the analogy between doctors and lawyers even more closely. Many attorneys specialize in one branch of the law, as doctors do in medicine.

But note this: You should not try to select a specialist yourself to handle a particular need or problem. Instead, go to a general lawyer to whom any problem can be presented. If he can't handle it himself, he will refer and recommend you to a specialist who can.

### How do you get acquainted with such a lawyer?

Like a doctor, an attorney cannot advertise himself. The result is, according to a recent survey, that the great majority of people in the average community don't know a single lawyer.

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK OCT. 3, 1953 One way to find a lawyer is in your church congregation. A lawyer active in his church is likely to be engaged in civic affairs or politics, in most cases will be a highly regarded member of the community.

Another bet is to inquire at your bank. Generally, the law firm that a bank has retained is equipped to advise on almost any type of problem or difficulty with which you may be faced.

You don't have to be in the Social Register to make your daughter a debutante this winter. If you go about it right, she can be considered as successfully launched socially as if she were a blue-blood.

Main reason for this is a shift in recent years from the fabulous comingout parties of the Brenda Frazier days to the mass debut. Generally these are balls (or "cotillions") given for a charity. Around 100 girls make their bows at the largest. (Proper time to bring your daughter out: during her freshman year in college, or approximately age 17.)

In New York, for example, there are four such events between Thanksgiving and Jan. 2. Screening of likely debs to be presented is not so strict as for the more exclusive subscription dances, such as the Junior Assemblies at the Plaza Hotel. Prices for each ball range from \$300 to \$500. Most of this is a donation to the charity sponsoring the ball.

Your daughter will be a full debutante if you present her at one or more of these balls. But she can follow this up with her own private party. Or she can skip the cotillions and have one large coming-out party of her own. (Two sets of parents can introduce their daughters at a joint coming-out party.)

An individual debut will cost a minimum of \$1,500. That's for a tea dance, running from \$10 to \$12 a head, and with a guest list of around 150 (usually the accepted minimum). A dinner dance is more expensive, a supper dance the costliest of all: It runs later, requires more than one orchestra—and is much bigger.

If you choose the private party, get one of the reputable social secretariat organizations to handle it. They have carefully culled lists of the most eligible young men—plus the names of the season's top debs.

Also, they will handle all arrangements—hotel, florists, champagne salesmen, caterers, and so on.

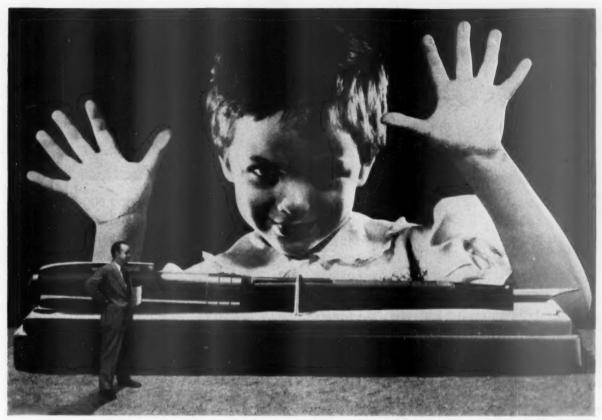
Get your car winterized now—before the first cold snap sets in. But before you add antifreeze, have the cooling system cleaned out thoroughly. Tubes of modern radiator cores are thin to cool hot-running engines. Acid that develops can eat pinholes in the system.

For that reason, it's also a good idea to put in a sealer—even though your cooling system seems tight. Many permanent-type antifreezes will go through unknown pinholes. Finally, be sure the attendant checks hose, clamps, and thermostat.

Several drugs can be used to treat to some extent the dangerous and painful heart ailment, angina pectoris. But prolonged tests by a group of doctors have shown that Peritrate, a tablet taken by mouth, is best.

Biggest advantage is that Peritrate remains effective for as long as five hours after administration.

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ADMIRE THE FOUNTAIN PEN, and ponder—how is it that it's priced low enough for universal ownership, yet of superior quality to the expensive product of just a few years back? Answer: precision production, ably abetted by the "manmade minerals," silicon carbide and aluminum oxide by CARBORUNDUM.® Today, barrels are finished and polished by

abrasive belts or grinding wheels. Points are slitted by paperthin abrasive wheels. Clips are finished by barrel tumbling with abrasive grain. CARBORUNDUM alone supplies all types of abrasives; quite naturally, many leading manufacturers, in all lines, have established CARBORUNDUM as their one, dependable, controlled-quality source of supply.

# Where's the limit to what you can do with CARBORUNDUM's "man-made minerals"?



EXTRA PURNACE LIFE you can measure not in weeks or months, but in years...that's what CARBORUNDUM Super Refractories give you. Enameling furnaces, continuous or batch type, are typical: CARBORUNDUM provides a specific material for each furnace area, with specific properties to meet a specific need. Knowing how to select and apply "manmade minerals" profitably has made CARBORUNDUM the world's largest producer of Super Refractories. Products of the Refractories Division

TWO-WAY BADIO generally has to depend, at one end, on a fluctuating power supply—the atorage battery of an automobile. Leading makers of these communication systems incorporate GLOBAR\*silicon carbide resistors in the circuits. Their voltage-compensating characteristics and their extreme permanence (they have no moving parts) make them ideally suited to this service.

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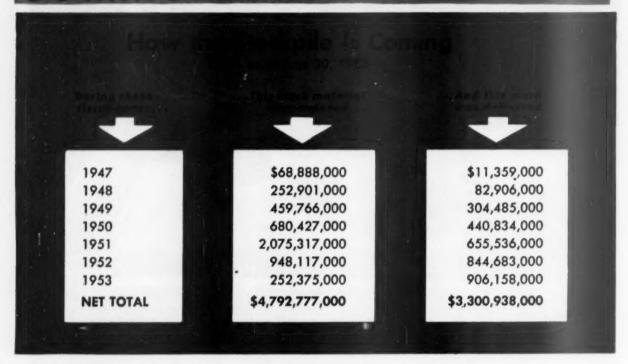
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Write to CARBORUNDUM for help on your problems that "man-made minerals" may solve

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# COMMODITIES



# Congress Probers Eye Stockpiling

Even McCarthy's committee may get into the act. The heaviest pressure comes from U.S. mining interests.

A full-scale investigation of the U.S. stockpiling program is in the cards for this fall. It was touched off last week at the American Mining Congress in Seattle, in a hearing conducted by a Senate subcommittee. Later, other Congressional committees may try to get into the act.

The subcommittee, headed by Sen. George W. Malone (R-Nev.), is an off-shoot of the Senate's Interior and Insular Affairs Committee. It has been looking into the stockpile picture for a couple of months and hopes to dominate any Congressional inquiry into the management of the program. But it may be in for competition from at least two other groups.

two other groups.

• Off and On—Sen. Joseph McCarthy's investigating subcommittee held a one-day hearing last February on charges of improper storage of palm oil that had congealed in cold weather. Since then McCarthy has held off-and-on closed hearings on metals, in San Francisco and elsewhere around the country. Now, supposedly, McCarthy has turned his stockpile investigation over to Malone. But McCarthy has a way of bouncing back into subjects with head-

line potentialities. Capitol observers don't close the door on his getting back into stockpiles, particularly if it looks as if the investigation has a chance of striking pay dirt

chance of striking pay dirt.

• GSA Aspect—Scn. Styles Bridges, chairman of the Appropriations Committee, also has investigators looking into the stockpile situation. He tentatively plans hearings on charges of mismanagement by General Service Administration in handling the \$5-billion program:

Observers feel that it was inevitable that Congress would scrutinize a purchase program of this dimension. However, there is mixed feeling as to what an investigation will come up with.

• Wide Range—The investigators will be probing a program covering 75 strategic and critical materials for which we are largely dependent on foreign lands—from antimony, hog bristles, and castor oil to rubber, tin, and zinc.

The stockpile has been so cloaked in secrecy that it is little understood by the public. Specific objectives and amounts on hand are still closely guarded. The policy made sense three years ago, when few contracts had been negotiated and the bulk of the buying was still to be done.

Now, with 80% of the total goals achieved, the secrecy is incongruous especially when far more significant military information is so well publicized—on aircraft and tank production and troop movements, for instance.

• In the Till-At the current market, total stockpile objectives are valued at \$7.1-billion. Since the program started in 1946, Congress has appropriated over \$5-billion for purchasing and maintenance. Only \$423-million is still on the books for procurement. That about equals the quantity delivered in the last six months alone.

The stockpile has actually spent \$3.2-billion so far for materials on hand. This inventory is valued at \$4.1-billion at current prices. Another \$1.4-billion is on order for later delivery. Of individual stockpile goals, 35 have been met, 15 are 80% or more achieved, and 25 are less than 80% complete.

• Slowdown—In line with the Administration's drive to slash spending, the Office of Defense Mobilization last month announced an official slowdown on stockpiling. As a result, new purchase commitments will be limited to the approximately 10 most critical most critical

The new ODM policy will not disturb

# SOUND CONDITIONING



Economy indicated the use of Cushiontone in sound conditioning the entire trade union office building in Kansas City, Kansas. This material absorbs

# No Noise Problems in Boilermakers' Building



Since shoppers like quiet, architect John D. to suit any color scheme. Maultsby suggested acoustical treatment for the ground floor stores, too. The entire first floor of the Brotherhood Building is occupied by stores. Here, attractive ceilings of Armstrong's Cushiontone let customers shop in comfort.

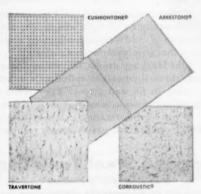
The International Brotherhood of strong's Acoustical Ceilings. Mean-Boilermakers enjoy quiet as much as anyone. That's why they completely sound conditioned their Kansas City rial." Write Armstrong Cork strong's Cushiontone. Nearly three Lancaster, Pennsylvania. acres of perforated wood fiber acoustical tile absorbs the electrons. of typewriters, telephones, and office machines throughout the building.

When large ceiling areas like this must be treated economically, Cushiontone is often the choice. It provides high acoustical efficiency at a surprisingly low cost.

In addition Cushiontone boosts office efficiency and morale in other ways. Its attractive white paint finish diffuses light without annoying glare. Cushiontone is easily cleaned and maintained, too. It can be washed when necessary or repainted

Cushiontone is one of Armstrong's complete line of acoustical materials. See your Armstrong Acoustical Contractor for helpful advice on Arm-

while, send for the free booklet, "How to Select an Acoustical Mate-



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CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

# "... the critics argue the program should be beefed up, not slowed down ..."

STOCKPILE PROBES starts on p. 186

cxisting contracts. Nor will it affect market guarantee agreements and other incentive plans made by the now-defunct Defense Materials Procurement Agency with high-cost producers over the past three years. Pending Bolivian tin and Chilean copper deals are exempt, too.

But the policy will restrict new purchases to one year plus lead time on deliveries, and will push some goals that would have been met next year back to 1958. The American Mining Congress speculates that no new commitments will be made for cobalt, metallurgical chrome, nickel, manganese, copper, fluorspar, tungsten, tin, lead, and zinc.

The new policy may be a sign that the pursestrings have been tied for additional money for stockpiling. No new funds were voted for fiscal 1954, and it is understood that unobligated stockpile funds still not spent by June 30, 1955, may be canceled by Congress.

• Criticism—The slowdown has already been criticized along the same lines as the fuss raised against the recent Air Force cutbacks. The critics say it's another case of the government being penny wise and pound foolish on defense planning.

According to plans set up in 1946, the stockpile is supposed to be the nation's reserve of strategic and critical raw materials to make up a projected deficit between supply and requirements for all-out war. There have been no big revisions in the program since then.

The critics argue that since 1946, when stockpile planning was based on a still distant and uncertain war, there have been so many critical international developments that the program is now obsolete—that it should be beefed up, not slowed down.

The mining industry is naturally peeved, too. It's ironic, the industry says, that when metals were tight, the stockpile entered the market—creating shortages, boosting prices sky high, and bringing back controls. Now when the mines can use a shot in the arm, the stockpile withdraws from an already declining market.

• Field for Inquiry—This is the sort of ground the stockpile investigators will be working on.

GSA Administrator Edmund Mansure says he is confident that an investigation will vindicate GSA's handling of the program. First, under the direction of the Munitions Board and



Pratt & Whitney Aircraft employees have built their credit union from 1000 members with \$30,500 assets in 1935 to 24,000 members with over \$11,000,000 today. In the U.S.A., over 16,000 credit unions serve more than 7,000,000 people. Total assets exceed \$2,000,000,000,000.



EAST HARTFORD AIRCRAFT FEDERAL CREDIT UNION BUILDING is centrally located for members' convenience. Savers' deposits increase about \$200,000 a month. Loans are processed at an average rate of 500 a week. Other credit unions operate with as few as 50 members. They are run by members at little or no expense to companies. Profitable credit union savings and low-cost loans help employees build security, avoid pay advancements and garnishments. Credit unions also operate in churches, lodges and communities.

# PRATT & WHITNEY AIRCRAFT EMPLOYEES OWN AND OPERATE \$11,000,000 CREDIT UNION

Employees of Pratt & Whitney Aircraft division of United Aircraft Corp. help each other to greater financial security, relieve management of many problems.

SAYS W.P. GWINN, vice-president of United Aircraft Corporation, and general manager of Pratt & Whitney Aircraft, famous producer of aircraft engines, "Our credit union has contributed greatly to the loyalty, morale and stability of our employees."



"THE CREDIT UNION is one of the reasons I'm glad I work at Pratt & Whitney Aircraft," says Thomas Bergamini, foreman. "It's a comfort for a man with a family to know he can get a low-cost loan when he needs it." Credit union provides special life insurance that pays loans if anything happens to borrowers.



"OUR CREDIT UNION has helped me save more than I ever saved before," says engineer Victor Giglio. "With the good dividends, too, it's a wonderful way to get ahead financially." The members get life insurance equal to savings up to \$1000.

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"... Malone is making a case for protecting domestic producers ..."

STOCKPILE PROBES starts on p. 186

now under Office of Defense Mobilization, GSA buys and stores strategic materials.

GSA's emergency procurement service, set up in 1950, buys under specifications laid down by ODM both nonperishable items like metals and minerals, and perishable items like drugs, vegetable oils, rubber. These perishable items must be rotated, which means that GSA is continually selling items from this stockpile and replacing them with new. It is in this area that the Congressional critics will concentrate their charges of mismanagement.

• Domestic Mines—However, those close to the stockpile program believe that the real push behind the criticisms comes from the ailing domestic mining industry, which is unhappy about the volume of minerals and metals being bought from foreign sources. GSA officials point out that foreign contracts that look bad on the basis of today's depressed market looked pretty good when the contracts were made.

They argue that early in the Korean war the military was breathing on the necks of the stockpilers demanding that they contract for the maximum amount of world production of strategic materials. Fearing that Korea might develop into a global war, the military wanted scarce and critical military materials from wherever obtainable in the largest amounts possible.

This meant that marginal producers were brought in at premium prices to boost production. Now, some of these foreign contracts for tungsten, copper, lead, and zinc look bad. But to get production started, the stockpilers had to agree to take a foreign sources' output for a specified number of years. Some of these contracts are still running, which is what makes the domestic producers hot under the collar.

• Iron Curtain—One facet of the program that is sure to come in for Congressional scrutiny is the purchase of materials behind the Iron Curtain. Early in the Korean war, tungsten, presumably from Red China, was bought in Hong Kong. Feathers for stuffing military pillows were bought from Poland, the only source of feathers suitable for military requirements.

The stockpilers are confident that a full probe won't turn up any fraud or mismanagement. What Malone primarily is after, they feel, is making a case for protecting domestic producers that can be used in the fight on reciprocal trade legislation next session.



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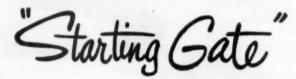
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### **COMMODITIES BRIEFS**

Steel scrap prices, often considered a bellwether for the entire steel industy, have tumbled more than 20% since the end of July. According to Iron Age magazine's composite price, they are now at their lowest point since May, 1950—just before Korea.

The Atomic Energy Commission will continue its long-term program for boosting uranium production. It has extended its system of price guarantees for another four years, through March, 1962, and its system of bonus payments for production from new mines for another three years, through February, 1957.

Foreign oil refining capacity is expanding rapidly, according to a worldwide survey by the Petroleum Administration for Defense. By the end of 1955, free world capacity outside the U.S. will be 40% greater than at the end of 1951. Europe will gain most in actual refining capacity, but percentagewise the greatest increase will be in the Far East.

Domestic expansion goals for the oil refining industry have been boosted by the Office of Defense Mobilization. These goals are used as a guide for granting fast tax write-offs for new projects. Although present refining capacity is more than enough to meet current needs, ODM wants a large standby reserve for use in emergency.

Chemists of the Institute of Gas Technology have developed a new process for making a natural gas substitute from natural gasoline and other oil products. The basic materials can easily be transported and stored; they are then converted to natural gas at times of peak demand. The new process is much more economical than older methods for producing gas substitutes from oil, since it also yields some valuable chemicals as byproducts.

Farm surpluses keep mounting up. As of June 30, Commodity Credit Corp. held \$3.5-billion worth of farm products under the government's price support program—almost two and a half times the total at the same time last year.

Farm export: A decline in three of the four most important export commodities accounted for the over-all drop of 31% in the year ended June 30 (BW–Sep.26'53,p169). Wheat dropped 36%, cotton 52%, and tobacco 13%. Corn provided the one cheery note; exports jumped sharply, came out 42% ahead of a year ago.

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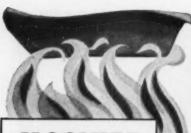
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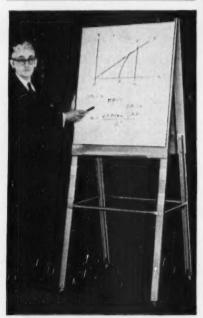
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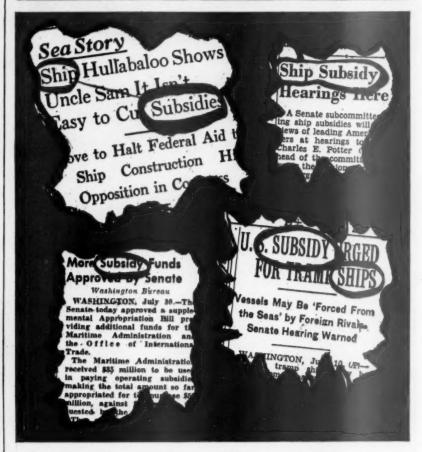


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# WHAT IT'S ABOUT



# Keeping the Flag Afloat

The U.S. merchant marine is on the skids-again.

Military cargoes resulting from Korean operations are dropping off, and U.S. foreign trade carried in American bottoms is fast approaching an all-time

Right now, less than 30% of our private foreign trade is carried in American ships.

All this adds up to a strong move for a bigger government aid program and the shelling out of more tax dollars in subsidy payments to keep the merchant marine healthy. The Administration will soon have to add the federal policy of supporting the U.S. merchant service to the list of problems slated for a new look.

• Alternatives—But both government brass and more progressive ship operators agree that government subsidy isn't in the long run the medicine to make a healthy merchant marine. They see only one solution to the problem of keeping the U.S. flag aboard mer-

chant ships. That is to increase overseas commerce through liberalizing our foreign trade agreements.

The alternative would seem to be bigger and bigger subsidy payments of all types each year to keep U.S. merchant ships at sea. And what has Maritime Administrator Louis Rothschild worried is the growing demand of ship operators for more federal aid.

• Reasons-The merchant marine's chief troubles right now are these:

 There's an excess of world shipping tonnage.

 No one really knows what's the normal peacetime U.S. merchant shipping business.

 Any cutting back of foreign economic or military aid is likely to cause the laying up of many U.S. ships.

U.S. operators see the only immediate answer to all these problems in more government aid.

• Totals—Since the passage of the Merchant Marine Act of 1936, Washington has paid out nearly a billion dollars in



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subsidy to the maritime industry. The great bulk of this comes in three categories: construction differential subsidies, repricing of war-built ships, and operating differential subsidies.

· Why Subsidies?-National security is the basic reason for all federal subsidies to shipping. The government feels that whatever the cost-within reason-the U.S. must not be caught without shipbuilding facilities and a merchant marine if war comes. In peacetime, foreign costs for ship construction, operation of ship lines, and labor are far below American costs. The aim of the various kinds of government aid is to enable U.S. builders and carriers to compete.

### I. Operating Subsidies

When merchant marine subsidies are mentioned, most businessmen are likely to think of the operating differential subsidy, which has totaled \$204-million since 1936.

Any U.S. citizen who has the ships, experience, financial backing and proper qualifications, and is operating over essential foreign trade routes can apply to the Federal Maritime Board for this subsidy. Once the board grants the subsidy, it's up to the Maritime Administration to work out the figures. The subsidy is given as a percentage to be applied to the subsidizable expenses of the operator.

Under the law, these are: (1) the wages of the ship's officers and crew; (2) subsistence of officers and crew; (3) maintenance and repair of the vessel; (4) voyage stores, supplies, and expendable equipment; (5) insurance.

· Figures-A separate rate is figured for each type of ship on each trade route. For example: A Victory Ship operating from Gulf ports to the east coast of South America would not necessarily have the same subsidy as a C-3 operating over the same routes or from the Gulf to Europe.

Subsidies are paid only to ships in

the foreign trade service.

Right now there are 15 lines operating 267 privately owned and four government owned ships that receive subsidy payments. They are: American Export Lines, Inc.; American Mail Line, Ltd.; American President Lines, Ltd.; Farrell Lines, Inc.; Grace Line, Inc.; Lykes Bros. Steamship Co., Inc.; Mississippi Shipping Co., Inc.; Moore-Mc-Cormick Lines, Inc.; New York and Cuba Mail Steamship Co.; Oceanic Steamship Co.; Pacific Argentine-Bra-zil Line, Inc.; Pacific Far East Line, Inc.; Pacific Transport Lines, Inc.; Seas Shipping Co., Inc.; and U.S. Lines Co.

· Restrictions-In return for subsidy payments, certain restrictions are imposed on ship operators by the government. Broadly speaking, they must op-



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erate on set routes on a fixed schedule basis and supply top quality service.

Without permission of the Federal Maritime Board, the operators cannot: charter a vessel for subsidy operation; operate any vessel 20 years old or older; engage in coastwise service; merge with other operators or start a business not connected with shipping; own, charter, or act as agent for a foreign flag operator competing with American flag service; or dispose of any interest in the

subsidy agreement.

Besides all this, the subsidized operators must set aside funds each year in a ship construction fund for replacement of their ships as they get older. The subsidized lines plus a few nonsubsidized ones that participate voluntarily have over \$200-million in the construction reserve fund on which no taxes are paid until the ships are constructed. The idea behind this is to stimulate private replacement.

· Recapture-Operating differential subsidies can be recaptured by the government. If a line shows profit over what the Maritime Administration figures is a reasonable return, it must refund part of its subsidy to the government. Since the program first went into effect in 1937, the subsidized lines have turned back to the government more than \$130-million.

### II. Construction Subsidies

Another form of federal aid to the merchant marine is the construction differential subsidy. It's the shipbuilders who get the break on this one. In order to get U.S. shipowners to buy American-built ships, the government will pay the difference between the cost of contracting for ship construction abroad and the U.S. shipbuilders price. The amount is fixed by the Maritime Administration.

To date, some 247 ships have been constructed under the subsidy program. Including the three ships delivered to the American Export Lines and the U.S. Lines last year-the Constitution, Independence, and United States-the gross subsidy allowed for construction

comes to \$426,185,833.

The 1936 act specified that the ships may be taken back by the government at the cost to the owner less depreciation. Inasmuch as a number of the 247 subsidy-built ships were taken over by the government during the war and either retained or lost, the construction differential subsidy payments were reduced by \$83.7-million, giving a net of \$342.5-million.

· Defense-The construction differential subsidy is separate from what the Maritime Administration calls national defense features. These are the extras that are built into the ship to meet Defense Dept. requirements in case the





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### ". . . the merchant marine gets a number of other aids from the government . . ."

MERCHANT MARINE starts on p. 194

ship has to be used as a troop carrier or military freighter.

That's why when the government agrees to go in on the construction of a new merchant ship you're likely to see three separate prices-cost to the operator, the construction differential subsidy, and cost of national defense features.

Take the new superliner, the S. S. United States. The construction differential subsidy that was allowed by the government amounted to about \$8,-225,000. National defense features came to roughly \$24,060,000. The ship cost the operator-the U.S. Lines -about \$38,088,000, but the grand total cost was \$70,373,000.

### III. Additional Benefits

The merchant marine gets a number of other aids from the government that do not show up in the form of direct subsidies. For example: The ship lines pay no tax on their ship replacement fund until a new ship is actually constructed and turned over to the operator by the shipyard. This amounts to a tax deferral rather than an outright benefit but it does allow the participating lines to accumulate replacement funds more rapidly than they could otherwise.

The Maritime Administration also undertakes to finance ship purchases. Suppose you contract to purchase a ship from the government. In addition to the construction subsidies, the government will underwrite the sale of the ship to the extent that you pay about 25% cash and the balance over a varying period of time-say 10 to 15 years. That way the government becomes the mortgage holder on the ship.

· Repricing-Another wrinkle that's helped shipowners is the price adjustment provision of the Merchant Ship Sales Act of 1946. Under this act, Congress provided a formula for the sale of ships constructed by the government during World War II.

In effect, the government underwrote the construction of the ships and sold them off to private individuals at a price substantially below cost under a complicated formula amounting to a special type of sale subsidy.

Of the 247 ships built under the construction differential subsidy program, 116 ships had their sales price adjusted downward. This resulted in another subsidy in which the government paid an additional \$230,553,371.

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# Not By Talk Alone

Talk about our economic outlook is almost as popular a topic of conversation as the latest Kinsey report. Across the nation there has been a spate of headlines and speeches denouncing depression mongers, and even deploring any talk about the possibilities of a down-

turn, no matter how slight.

This school of thought believes the only real danger of business recession is the fear of recession. Hence, the less said about bad times ahead the better. As prominent a figure as Benjamin F. Fairless of U.S. Steel has warned that if the "prophets of pessimism" were heeded, the nation could "predict" itself into a depression. And there are widely publicized meetings, such as the "Why I Am Not Afraid" luncheon of the New York Sales Executive Club, which are designed to qualm fears with drum-beating optimism.

Whether a nation can talk itself into hard times is a moot point. The record of the early 30s proves we cannot talk ourselves into prosperity without a

strong assist from economic factors.

This being the case, we doubt that forecasts of gloom can, all alone, produce a depression. All those who now attack the pessimists should remember that we have been hearing their dismal predictions all through the postwar era. The batting average of the pessimists is practically zero, so that even if they happened to be right for once, it would be erroneous to credit them with being a major influence on our economy.

What we are now witnessing is the beginning of a long expected adjustment from boom conditions. This leveling off should be cause for neither deep gloom nor blind refusal to face the facts. There may be more danger, in fact, in playing the ostrich than in sounding

off like a Cassandra.

This is because unrestrained optimism can lead to a resistance against making changes. If businessmen hide their heads from the realities of the situation, and do not take corrective measures to adjust inventories and prices and profits, then any downturn is likely to become more painful and prolonged than need be.

So far the declines that have occurred in various sectors of the economy are minor. How far and how long the downturn will go is still uncertain. But if further downward adjustments are dictated by economic events, all the cheery words, prayers and unbounded optimism will foster, rather than prevent them.

### Fighting Paper

The United States is fast becoming a nation of office workers enmeshed in red tape. This is the opinion of Emmett J. Leahy, an authority on business records, who estimates that our office workers are now as numerous as agricultural workers (page 79). Moreover, this group is putting 175-billion new pieces of paper into circulation each year.

Paper work, and paper workers, are essential to modern business, yet the rapid increase in both categories suggests that they are getting out of hand. The shuffling and reshuffling of vast mountains of paper means an enormous waste in manpower and material.

Businessmen are well advised to take a close look at this cobweb. It may not be easy to part with old records or the fashionable habit of writing everything in triplicate. But this is one way to release many workers for more productive jobs.

# Against Discrimination

The President's Committee on Government Contracts has been told by President Eisenhower himself that it must guard against all and every kind of discrimination among those who have contracts from the government. He said: "What we cherish as an ideal for our nation as a whole must today be honestly exemplified by the Federal establishment."

Eisenhower emphasized that "on no level of our national existence can inequality be justified," but that with the Federal government itself "tolerance of inequality would be odious." In establishing the committee, the President made Vice-President Nixon its chairman. His will be the task of seeing to it that the nondiscrimination clause in contracts is enforced.

The Administration thus demonstrates that it is taking seriously the pledges that the Republicans made to the nation. It has affirmed the principles of tolerance that the GOP embraced in Chicago in 1952. We are glad to see that the Administration is determined to keep its word—even in so controversial a field as that of fair employment.

## What This Country Needs...

We find ourselves encouraged no end by a recent announcement of the National Automatic Merchandise Association, which assures us that slot machines will in the future utter a polite "Thank you!" after having been fed a nickel, dime or quarter.

Here, at last, is a frontier for the inventive engineering mind. We foresee a machine that can talk back to the customer with all the fervor of a human sales clerk.

But some day, the customer is likely to find a way to turn the thing off. When that time comes, the industry may create an entirely new and epoch-making vending device: A silent, nontalking, entirely mute slot machine. The customer will deposit his coin, and from the machine's metallic snout will emerge a nickel's worth of precious silence.





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